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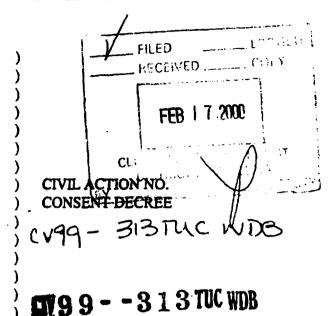
IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF ARIZONA

THE UNITED STATES OF AMERICA,

Plaintiff.

TUCSON AIRPORT AUTHORITY, CITY OF TUCSON, GENERAL DYNAMICS CORPORATION, and McDONNELL DOUGLAS CORPORATION.

Defendants.



CONSENT DECREE

I. BACKGROUND

- A The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), as amended, 42 U.S.C. §§ 9606, 9607, and Section 7003 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6973 ("RCRA").
- B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the United States Department of Justice for



response actions at the Site defined in Section IV of this Consent Decree, which is located within and is a part of the Tucson International Airport Area Superfund Site ("TIAA Superfund Site"), in response to alleged releases and threatened releases of hazardous substances from the Site, together with accrued interest thereon; and (2) performance of studies and response work by the defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP").

- C. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of Arizona (the "State") in writing on August 31, 1998 of negotiations with potentially responsible parties regarding the implementation of the remedial design and remedial action for the Site, and EPA has provided the State with an opportunity to participate in such negotiations and be a party to this Consent Decree.
- D. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), on September 29, 1998, EPA notified the United States Fish & Wildlife Service and the Arizona Department of Environmental Quality ("ADEQ") of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources and encouraged the trustee(s) to participate in the negotiation of this Consent Decree.
- E. Settling Defendants (as defined in Section IV), by entering into this Consent Decree, do not admit any liability to Plaintiff arising out of the transactions or occurrences alleged in the complaint, nor do they acknowledge that the release or threatened release of hazardous substance(s) at or from the Site constitutes an imminent

or substantial endangerment to the public health or welfare or the environment. Settling Federal Agency, by entering into this Consent Decree, does not admit any liability arising out of the transactions or occurrences alleged in the complaint and in any actual or potential counterclaim, cross-claim, third-party claim, fourth-party claim or other cause of action that has been or could be asserted by Settling Defendants.

- F. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 9, 1983, 48 Fed. Reg. 40658.
- G. In response to a release or a substantial threat of a release of a hazardous substance(s) at or from the Site, on August 25, 1992, EPA issued to the Tucson Airport Authority ("TAA"), the City of Tucson (the "City"), General Dynamics

 Corporation ("General Dynamics") and McDonnell Douglas Corporation ("McDonnell Douglas"), a Unilateral Administrative Order for Remedial Investigation and Feasibility

 Study of the Site, USEPA Region IX Docket No. 92-09, dated July 9, 1992, and amended August 25, 1992 ("RI/FS UAO").
- H. Pursuant to the RI/FS UAO, a Remedial Investigation ("RI")
 Report was submitted on October 31, 1996 and a Feasibility Study ("FS") Report was submitted on June 10, 1997. The RI Report and FS Report were approved by EPA on May 2, 1997 and July 10, 1997, respectively. EPA has determined pursuant to Section XXVI of the RI/FS UAO that the requirements of said UAO have been satisfied.
- I. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the FS and of the proposed plan for remedial action,

in five major local newspapers of general circulation on July 17, 1997 and July 21, 1997. EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. A copy of the transcript of the public meeting is available to the public as part of the administrative record upon which the Regional Administrator based the selection of the response action.

- J. The decision by EPA on the remedial action to be implemented at the Site is embodied in a final Record of Decision ("ROD"), executed on September 30, 1997, on which the State has given its concurrence. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA.
- K. Based on the information presently available to it, EPA believes that the Work will be properly and promptly conducted by Settling Defendants if conducted in accordance with the requirements of this Consent Decree and its appendices.
- L. Based on the information presently available to it, and in light of the degree of investigation that has been performed at the Site, EPA believes that it is unlikely that further response actions will be needed at the Site.
- M. Solely for the purposes of Section 113(j) of CERCLA, the Remedial Action selected by the ROD and the Work to be performed by Settling Defendants shall constitute a response action taken or ordered by the President.
- N. The Parties recognize, and the Court by entering this Consent

 Decree finds, that this Consent Decree has been negotiated by the Parties in good faith

 and implementation of this Consent Decree will expedite the cleanup of the Site and will

avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

IL JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 6973, 9606, 9607, and 9613(b). This Court also has personal jurisdiction over the Parties. Solely for the purposes of this Consent Decree and the underlying complaint, the Parties waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. The Parties shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

- 2. This Consent Decree applies to and is binding upon the Parties and their successors and assigns. Any change in ownership or corporate status of a Settling Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter such Settling Defendant's responsibilities under this Consent Decree.
- ach contractor hired to perform the Work (as defined below) required by this Consent Decree and to each person representing any Settling Defendant with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. Settling Defendants or their contractors shall provide written notice of the Consent Decree to all subcontractors

Defendants shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Settling Defendants within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

- 4. Unless otherwise expressly provided herein, terms used in this Consent

 Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall

 have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed

 below are used in this Consent Decree or in the appendices attached hereto and incorporated

 hereunder, the following definitions shall apply:
- A. "Airport Property" shall mean that portion of the Site which is owned by the City and leased by the TAA, as generally depicted on the figure attached hereto as Appendix C.
- B. "CERCLA" shall mean the Comprehensive Environmental Response,
 Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
- C. "Consent Decree" shall mean this Decree and all Appendices attached hereto (listed in Section XXIX). In the event of conflict between this Decree and any Appendix, this Decree shall control. This Consent Decree does not include Exhibits

1 through 4, which are attached for reference only.

- D. "Day" or "day" shall mean Working Day, unless expressly stated to be a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next Working Day.
- E. "Deliverable" or "Deliverables" shall mean one or more of the work plans, reports, schedules or other submittals listed on Appendix K, the requirements of which are more particularly described in the \$OW.
- F. "Effective Date" shall mean the date described in Section XXVII of this Consent Decree.
- G. "EPA" shall mean the United States Environmental Protection

 Agency and any successor departments or agencies of the United States.
- H. "Future Response Costs" shall mean all costs with respect to the Site incurred after the Effective Date of this Consent Decree including, but not limited to, direct and indirect costs, that the United States (excluding Settling Federal Agency) incurs in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent Decree including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Sections VII (Remedy Review), IX (Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation), XV (Emergency

Response) and Paragraph 86 of Section XXI (Work Takeover). Future Response Costs shall also include all Interim Response Costs and all Interest on Past Response Costs that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from December 31, 1998 to the Effective Date.

- I. "Groundwater Treatment System" shall mean the remedy for the Shallow Groundwater Zone required by the ROD and more particularly described in the Statement of Work attached as <u>Appendix B</u>.
- J. "Individual Remedy" shall mean the SVE Remedy, the SGZ
 Remedy, the PCB Soils Remedy, or the TAA Landfill Remedy.
- K. "Interest," shall mean interest at the rate specified for interest on investments of the Hazardous Substance Superfund established under Subchapter A of . Chapter 98 of Title 26 of the U.S. Code, compounded on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).
- L. "Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) paid by United States (excluding Settling Federal Agency) in connection with the Site commencing January 1, 1999 and continuing through the Effective Date, or (b) incurred prior to the Effective Date of this Consent Decree but paid after such date, including but not limited to costs incurred by DOI in the amount of \$1.875.
- M. "National Contingency Plan" or "NCP" shall mean the National
 Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to
 Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any

amendments thereto.

- N. "Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action as required under any of the operation and maintenance manuals approved or developed by EPA pursuant to this Consent Decree and the SOW.
- O. "Off-Airport Property" shall mean those areas of the Site that are not included within the definition of Airport Property.
- P. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral or an upper case letter.
 - Q. "Parties" shall mean the United States and Settling Defendants.
- R. "Past Response Actions" shall mean all investigations, removals, treatability studies or other response actions conducted at the Site prior to the Effective Date of this Consent Decree, including, but not limited to, response actions taken under the RI/FS UAO, the Unilateral Administrative Order, Region IX Docket No. 91-05, issued in January 1991 for the removal action regarding liquid waste and underground concrete container ("1991 UAO"), and the Unilateral Administrative Order for Removal Response Activities Pursuant to Section 106 of the Comprehensive Environmental Response Compensation and Liability Act of 1990, as amended, 42 U.S.C. Section 9606(a), Region IX Docket No. 96-14, dated October 4, 1996 ("PCB UAO").
- S. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States (excluding Settling Federal Agency) has paid at or in connection with the Site through December 31, 1998, plus

Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

- T. "PCB Soils Remedy" shall mean the remedy for PCB and metals contaminated soils selected in section 10.0 of the ROD and summarized in section 2.3 of the SOW.
- U. "Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Action, set forth in the ROD and the SOW, and any modification of such standards by EPA pursuant to Paragraph 13 (Performance Standards; TI Zone Modification Petition) of this Consent Decree.
 - V. "Plaintiff" shall mean the United States.
- W. "Plug-In Subsites" shall mean the subsites listed in Table 2.2 of the SOW and generally depicted on the map attached as Figure 1.4 of the ROD.
- X. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42
 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).
- Y. "Record of Decision" or "ROD" shall mean the Record of

 Decision, Tucson International Airport Area Superfund Site, Tucson, Arizona, Airport

 Property Soils and Shallow Groundwater Zone, Burr-Brown Property Soils, Former

 West-Cap Property Soils signed on September 30, 1997 by the Regional Administrator,

 EPA Region IX, or her delegate, and all attachments thereto. The ROD is attached as

 Appendix A.
- Z. "Regional Aquifer" shall mean the portion of the aquifer within the TIAA Superfund Site, the top of which is approximately 110 feet below ground surface

(bgs) in the south and southwest portions of the TIAA Superfund Site and is approximately 150 feet bgs in the northwest. Regional Aquifer does not include the Vadose Zone or the Shallow Groundwater Zone ("SGZ") at the Site. Remediation of the Regional Aquifer is being addressed pursuant to the TARP Consent Decree.

AA. "Remedial Action" shall mean those activities, except for

Operation and Maintenance, undertaken by Settling Defendants to implement the ROD

with respect to the Site, in accordance with the SOW and in accordance with all final

Remedial Design and Remedial Action Work Plans and all other plans approved by EPA.

- BB. "Remedial Action Work Plan(s)" shall mean documents, as described in section 4.1 of the SOW, developed pursuant to Paragraph 11 of this Consent Decree and approved by EPA, and any amendments thereto.
- CC. "Remedial Design" shall mean those activities undertaken by

 Settling Defendants to develop the final plans and specifications for the Remedial Action

 pursuant to the Remedial Design Work Plan(s).
- DD. "Remedial Design Work Plan(s)" shall mean all documents developed pursuant to Paragraph 11 of this Consent Decfee and approved by EPA, and any amendments thereto.
- Table 2.1 of the SOW and generally depicted on the map attached as Figure 2.1 of the SOW.
- FF. "Restricted Airport Property" shall mean the areas generally depicted as heavily shaded on the map at Appendix L-1 and described on Appendix L-2

as Parcels A through F, which are owned by TAA or the City.

- GG. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.
- HH. "Settlement Agreement" shall mean the agreement dated March 25, 1999 and entered into by TAA, the City and the United States on behalf of Settling Federal Agency. The Settlement Agreement is attached hereto for reference only as Exhibit 3.
- II. "Settling Defendants" shall mean the Tucson Airport Authority, the City of Tucson, General Dynamics Corporation, and McDonnell Douglas Corporation and each of their successors and assigns.
- JJ. "Settling Federal Agency" shall mean the United States

 Department of the Air Force, which is resolving certain claims which have been or could be asserted against it with regard to this Site as provided in this Consent Decree, and its successors and assigns.
- KK. "Shallow Groundwater Zone" or "SGZ" shall mean the hydrostratigraphic unit overlying the Regional Aquifer as defined herein, which consists predominately of saturated, fine-grained clay and silt sediment interbedded with thin, generally discontinuous lenses of sand or other coarse-grained material. The upper boundary of the SGZ is located approximately 2,460 feet above mean sea level (AMSL) and the approximate lower boundary of the SGZ extends to the top of the Regional Aquifer. Appendix E attached hereto and incorporated herein by reference generally depicts the lateral contours of the VOC-contaminated plume in the SGZ.

LL. "Site" shall mean the areas within the TIAA Superfund Site that were identified during the Remedial Investigation as Zones A through F and are generally depicted in their areal extent on the figure attached hereto as <u>Appendix C</u>. The Site does not include the Regional Aquifer or any Covered Matter, as that term is defined in the TARP Consent Decree.

MM. "SGZ Remedy" shall mean the remedy for contamination in the Shallow Groundwater Zone selected in Section 10.0 of the ROD and summarized in section 2.2 of the SOW. The SGZ Remedy addresses the SGZ inside the TI Zone (on the Airport Property) and the SGZ outside the TI Zone (on the Airport Property and the Off-Airport Property), and includes any modifications made pursuant to Paragraph 13 of this Consent Decree.

NN. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at the Site, as set forth in <u>Appendix B</u> to this Consent Decree and any modifications to the SOW made in accordance with this Consent Decree.

- OO. "SVE Remedy" shall mean the remedy for VOC contaminated soils selected in the ROD and summarized in section 2.1 of the SOW. The SVE Remedy addresses the Airport Property only and includes the Plug-in Subsites and the Remedy Required Subsites.
- PP. "Supervising Contractor" shall mean the principal contractor retained by the Settling Defendants to assist Settling Defendants' Project Coordinator in supervising and directing the implementation of the Work under this Consent Decree.

- QQ. "TAA Landfill Remedy" shall mean the remedy for closure of the TAA solid waste landfill selected in Section 10.0 of the ROD and summarized in section 2.4 of the SOW.
- RR. "TARP Consent Decree" shall mean the consent decree in <u>United</u>

 States v. Tucson Airport Authority et al. CIV No. 90-587 RMB, which was entered by
 the U.S. District Court for the District of Arizona on June 5, 1991, and all amendments,
 modifications and appendices thereto.
- SS. "Technical Impracticability Zone" or "TI Zone" shall mean the 2-acre area for which applicable or relevant and appropriate requirements ("ARARs") for in situ groundwater restoration were waived in the ROD based upon EPA's determination that such restoration is technically impracticable, and any additional areas for which EPA may determine that in situ groundwater restoration is technically impracticable in response to a petition submitted pursuant to Paragraph 13 of this Consent Decree. The TI Zone is generally depicted in <u>Appendix E</u> attached hereto.
- TT. "TIAA Superfund Site" shall mean the Tucson International
 Airport Area Superfund Site as depicted generally in Appendix D.
- UU. "United States" shall mean the United States of America, including its departments, agencies and instrumentalities, which includes without limitation EPA.

 Settling Federal Agency and any federal natural resources trustee, and each of their successors and assigns.
- VV. "Vadose Zone" shall mean the unsaturated volume of soil and soil gas on or below the Site. The upper boundary of the Vadose Zone is located at the

ground surface and the approximate lower boundary extends to the top of the Regional Aquifer or the SGZ, whichever is encountered first.

WW. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

XX. "Work" shall mean all activities Settling Defendants are required to perform under this Consent Decree, except those required by Section XXV (Retention of Records). The Work includes any modifications to the SGZ Remedy pursuant to Paragraph 13 of this Consent Decree.

YY. "Working Day" shall mean a day other than a Saturday, Sunday, or federal holiday.

V. GENERAL PROVISIONS

5. Objectives of the Parties.

The objectives of the Parties in entering into this Consent Decree are to (i) protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site by Settling Defendants, (ii) to reimburse response costs of Plaintiff, (iii) to resolve the claims of Plaintiff against Settling Defendants, and (iv) to resolve certain of the claims of Settling Defendants against the United States which have been or could have been asserted with regard to the Site as provided in this Consent Decree.

6. Commitments by Settling Defendants and Settling Federal Agency.

a. Performing the Work.

Settling Defendants shall perform the Work as provided in this Consent Decree, the ROD, the SOW, and all work plans, and other plans, standards, specifications and schedules set forth herein or developed by Settling Defendants and approved by EPA pursuant to this Consent Decree.

b. Financing the Work and Reimbursement of Past Response Costs and Future Response Costs.

Settling Defendants shall finance the Work and shall reimburse the United States (excluding Settling Federal Agency) for Past Response Costs, Interim Response Costs, and Future Response Costs as provided in this Consent Decree. The United States on behalf of Settling Federal Agency shall make the payment required pursuant to the Settlement Agreement, as specified in Paragraph 51.a of this Consent Decree.

c. <u>Joint and Several Liability</u>.

With the exception of the City, the obligations of Settling Defendants to finance and perform the Work and to pay amounts owed the United States under this Consent Decree are joint and several. In the event of the insolvency or other failure of any one or more Settling Defendants to implement the requirements of this Consent Decree, the remaining Settling Defendants shall complete all such requirements.

7. Compliance With Applicable Law.

All activities undertaken by Settling Defendants pursuant to this Consent

Decree shall be performed in accordance with the requirements of all applicable federal

and state laws and regulations. Settling Defendants must also comply with all applicable

or relevant and appropriate requirements of all Federal and state environmental laws ("ARARs") as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. Permits.

- a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-Site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-Site requires a federal or state permit or approval, Settling Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
- b. Settling Defendants may seek relief under the provisions of

 Section XVIII (Force Majeure) of this Consent Decree for any delay in the performance

 of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or

 license required for the Work.
- c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.
 - Notice to Successors-in-Title.
 - a. Notice of Remedial Action.

With respect to the Restricted Airport Property, within 15 days after the entry of this Consent Decree, the City shall record a notice in the form attached hereto as

Appendix F with the County Recorder's Office for the County of Pima, State of Arizona. The City shall provide EPA with a copy of the recorded notice stamped by the County Recorder's Office within 10 days after the City receives the stamped recorded document from the County Recorder's Office. EPA agrees to execute and record a termination of the recorded notice, substantially in the form of Appendix G hereto as follows: with respect to Parcel D, EPA will record such notice after Certification of Completion of the Work for the TAA Landfill Remedy; with respect to Parcels B, C and E, EPA will record such notice after Certification of Completion of the Work for the SVE Remedy; with respect to Parcel F, EPA will record such notice after Certification of Completion of the Work for the PCB Soils Remedy; and with respect to Parcel A, EPA will record such notice after Certification of Completion of the Work for the SGZ Remedy.

b. Conveyance of Property Interests (Excepting Leaseholds).

At least 30 days prior to the conveyance of any fee or mortgage interest in property located within the Restricted Airport Property, the Party conveying the interest, whether the City or TAA, shall (i) give the grantee written notice of this Consent Decree, and (ii) negotiate with grantee an instrument by which the conveyancing Party shall reserve an interest in the real property that is being conveyed that retains a right of access to the Restricted Airport Property (hereinafter referred to as "access easements") and that retains, or conveys to an appropriate third party, a right to enforce restrictions on the use of such Restricted Airport Property (hereinafter referred to as restrictive easements) pursuant to Section IX (Access and Institutional Controls) substantially in the form attached as Appendix H. At least 30 days prior to such conveyance the Party conveying

the interest, whether the City or TAA, shall also give written notice to EPA of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree, access easements and/or restrictive easement was given to the grantee. The conveyancing Party shall, in the instrument of conveyance (whether a deed, quit claim, deed of trust or mortgage), reserve and make the conveyance subject to the rights set forth on Appendix H.

c. Conveyance of Leasehold Interests.

Any lease or sublease pursuant to which such TAA or the City conveys a leasehold interest in any portion of the Restricted Airport Property shall be subject to and shall reference this Consent Decree, the rights granted to EPA herein to access the Site and enforce compliance with the Consent Decree, and the obligation of the Parties with respect to remediation of the Site. EPA has approved the terms to be included in any such lease or sublease a copy of which is attached hereto as Appendix I. TAA and/or the City have furnished to EPA a list of tenants on the Restricted Airport Property as of the date of this Consent Decree, and will annually update such list. EPA shall have a right to audit leases of the Restricted Airport Property to ensure compliance with this Paragraph.

d. Survival of Obligations.

No conveyance of any interest in the Airport Property by TAA or the City shall relieve such party of its obligations under this Consent Decree. Any conveyance of any interest in the Restricted Airport Property shall be made expressly subject to the rights granted to EPA herein, including the access and enforcement rights granted pursuant to Section IX hereof (Access and Institutional Controls), and the conveyancing

party shall retain any access or other rights required for Settling Defendants to carry out their obligations hereunder as provided in paragraphs b. and c. above. If EPA approves, the grantee in any such conveyance may perform some or all of the Work under this Consent Decree.

VI. PERFORMANCE OF THE WORK BY SETTLING DEFENDANTS

- 10. Selection of Supervising Contractor.
- a. All aspects of the Work to be performed by Settling Defendants
 pursuant to Sections VI (Performance of the Work by Settling Defendants), VII (Remedy
 Review), VIII (Quality Assurance, Sampling and Data Analysis), and XV (Emergency
 Response) of this Consent Decree shall be under the direction and supervision of either
 the Supervising Contractor or Settling Defendants' Project Coordinator. Settling
 Defendants have notified EPA in writing of the name, title, and qualifications of their
 proposed Supervising Contractor and EPA has approved such Supervising Contractor. If
 at any time thereafter, Settling Defendants propose to change a Supervising Contractor,
 Settling Defendants shall give such notice to EPA and must obtain written authorization
 to proceed from EPA, before the new Supervising Contractor performs, directs, or
 supervises any Work under this Consent Decree.
- b. If EPA disapproves a proposed Supervising Contractor, EPA will notify Settling Defendants in writing. Settling Defendants shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to them within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it

disapproves and an authorization to proceed with respect to any of the other contractors.

Settling Defendants may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents the Settling Defendants from meeting one or more deadlines in a plan approved by the EPA pursuant to this Consent Decree, Settling Defendants may seek relief under the provisions of Section XVIII (Force Majeure) hereof.

11. General RD and RA Requirements.

a. Deliverables.

Settling Defendants shall perform the Work as more particularly described for each Individual Remedy which is a part of the Remedial Action in accordance with the ROD, this Consent Decree, and the SOW. Settling Defendants shall submit to EPA each Deliverable in accordance with the schedule set forth in this Consent Decree and the SOW. As part of the Work, Settling Defendants shall prepare each Deliverable to meet the specifications and requirements set forth in the ROD, this Consent Decree and the SOW. Settling Defendants shall submit to EPA each Deliverable and any other work plan, plan, specification, report or schedule required under each approved Deliverable in accordance with the approved schedule for review and approval pursuant to Section XI [EPA Approval of Plans and Other Submissions).

Upon approval by EPA of any such Deliverable or any other work plan.

plan, specifications, report or schedule, Settling Defendants shall implement any work specified therein in accordance with the schedule set forth in this Consent Decree and/or such Deliverable or other EPA approved work plan, plan, specification, report or schedule.

b. Enforceability of Submittals.

Upon approval by EPA, all Deliverables and all other work plans, plans, specifications, reports, and schedules submitted by Settling Defendants to EPA pursuant to this Consent Decree or the SOW, shall be incorporated into and become enforceable under this Consent Decree. In the event that EPA undertakes or completes any response action pursuant to this Consent Decree, any resulting Deliverable or other work plan, plan, specification, report, or schedule shall be incorporated into and become enforceable under this Consent Decree.

c. Remedial Design Work Plan.

Within 60 days following the Effective Date of this Consent Decree,

Settling Defendants shall submit to EPA a work plan for the design of the Remedial

Action at the Site ("Remedial Design Work Plan" or "RD Work Plan"). The Remedial

Design Work Plan shall provide for design of each of the Individual Remedies which are

part of the Remedial Action for the Site set forth in the ROD, in accordance with the

SOW and for achievement of the Performance Standards and other requirements set forth

in the ROD, this Consent Decree and/or the SOW. Upon approval of the Remedial

Design Work Plan by EPA, and submittal of the Health and Safety Plan for all field

activities to EPA, Settling Defendants shall implement the Remedial Design Work Plan.

Settling Defendants shall submit to EPA all plans, submittals and other Deliverables required under the approved Remedial Design Work Plan in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions).

- 12. Remedy Specific RD and RA.
- a. Work Obligations

Settling Defendants shall design, construct, implement and undertake all other Work necessary to effect the Individual Remedies selected in Section 10.0 of the ROD and achieve the Performance Standards and other requirements set forth in the ROD in accordance with this Consent Decree, the ROD, the SOW and Deliverables approved by EPA. The Individual Remedies set forth in Section 10.0 of the ROD are the SVE Remedy, the SGZ Remedy, the PCB Soils Remedy and the TAA Landfill Remedy.

Settling Defendants' obligations for the Work are more particularly described in the SOW. Settling Defendants' obligations include, but are not limited to, (i) evaluation of the technological options identified in the ROD and the SOW for the SVE Remedy and the SGZ Remedy using the criteria set forth in the SOW and (ii) submittal to EPA of Health and Safety Plans for field activities which conform to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 CFR 1910.120.

b. Within the time periods set forth in Appendix K, Settling

Defendants shall submit to EPA for its review and approval the Deliverables listed in

Appendix K in accordance with the requirements set forth in the ROD, this Consent

Decree and the SOW. Upon approval by EPA, each Deliverable, including any plans or schedules set forth therein, shall be incorporated into and become enforceable under this Consent Decree. Notwithstanding the foregoing, until payment is made by the United States on behalf of Settling Federal Agency as described in Paragraph 51.a. of this Consent Decree, Settling Defendants shall not be required to perform any Work other than those activities specified in section 3.0 of the SOW. After completion of all activities required by section 3.0 of the SOW, the failure of the United States on behalf of Settling Federal Agency to make the payment described in Paragraph 51.a. shall be considered a force majeure event.

- c. Settling Defendants may accrue a number of days equal to the aggregate number of days any original Deliverable is submitted prior to the due date specified in Appendix K. Settling Defendants may use all or any part of such accrued days to extend the due date(s) of any subsequent original Deliverable, provided, that the number of days by which any due date is extended does not exceed the number of days accrued as of the date such extension is exercised. The preceding sentence will not prevent or affect a request for an extension of a due date because of a force majeure event.
- d. Settling Defendants shall submit to EPA for written approval all Deliverables, except Progress Reports. EPA's approval process is set forth in Paragraph 36 of this Consent Decree. Unless otherwise directed by EPA, Settling Defendants shall not commence construction for any Individual Remedy prior to approval of the Remedial Design Work Plan for such Individual Remedy.

- 13. Performance Standards: TI Zone Modification Petition.
- a. Operation of the Remedial Action.

Except as set forth in this Paragraph 13, Settling Defendants shall continue to implement the Remedial Action and O&M until the Performance Standards are achieved and for so long thereafter as is otherwise required under this Consent Decree.

b. Petition to Modify the TI Zone.

Settling Defendants may petition EPA to waive compliance with one or more of the Performance Standards for groundwater contaminants present in the Shallow Groundwater Zone outside of the TI Zone based on a demonstration that it is technically impracticable from an engineering perspective to attain those standards. Settling Defendants shall provide copies of any such petition to the United States pursuant to Section XXVI (Notices and Submissions) of this Consent Decree.

In responding to any such petition, EPA will determine whether attainment of a particular Performance Standard is technically impracticable based upon the engineering feasibility and reliability of the remedy. EPA will base any requested determination on site-specific data and conditions.

To assure sufficient information to reliably determine the technical practicability of achieving the Performance Standards, EPA will consider a petition for a waiver of Performance Standards on technical impracticability grounds only as follows:

(i) Settling Defendants may submit a petition to waive the Performance Standards for the portion of the Groundwater Treatment System for the SGZ Remedy outside of the TI Zone and on the Airport Property only after the Groundwater Treatment

System has been functioning and operational for 24 months and the Settling

Defendants have submitted to EPA the Deliverable entitled SGZ Remedy Outside

TI Zone Performance Standard Attainment Evaluation Report for the Airport

Property;

(ii) Settling Defendants may submit a petition to waive the Performance Standards for the portion of the Groundwater Treatment System for the SGZ Remedy for the Off-Airport Property only after the Groundwater Treatment System for the SGZ Remedy for the Off-Airport Property has been functioning and operational for 60 months and Settling Defendants have submitted to EPA the Deliverable entitled the SGZ Remedy Outside the TI Zone Performance Standard Attainment Evaluation Report for the Off-Airport Property.

Neither the submission of a petition by Settling Defendants nor the granting of a waiver of one or more Performance Standards by EPA pursuant to this Section shall relieve Settling Defendants of their obligation to (i) continue to operate the Groundwater Treatment System for the SGZ Remedy in any area for which the applicable Performance Standard(s) have not been waived by EPA, (ii) attain Performance Standards for the SGZ Remedy for any contaminants for which EPA has not specifically granted a waiver, and (iii) complete any other obligation under this Consent Decree.

Such a petition shall include, at a minimum, the information and analyses required by EPA guidance and the Site-specific information described in Subparagraphs 13.b.(1) through 13.b.(12) as follows:

(1) A list of each Performance Standard for which a waiver is sought, and the spatial

- limits for which they are sought. The justification for a waiver required by items 13.b.(2) (12) below must be made for each contaminant or class of contaminants for which a waiver is sought.
- (2) A description of known or suspected shallow groundwater contaminant sources at the Site, including dense non-aqueous phase liquid ("DNAPL") contaminants.

 The petition shall also describe source control and removal efforts that have been implemented and the effectiveness of those efforts.
- Comprehensive monitoring data for the Shallow Groundwater Zone and an (3) evaluation of the implementation of the Groundwater Treatment System, as it may be modified pursuant to this Consent Decree or the SOW, along with any other remediation actions performed which enhanced or affected this SGZ Remedy. Using an appropriate engineering and statistical analysis, the monitoring data and performance evaluation shall demonstrate that (i) the SGZ Remedy for the Airport Property that is outside the TI Zone has been operating for 24 months and (ii) the SGZ Remedy for the Off-Airport Property has been operating for 60 months, in order to permit a reliable analysis of the SGZ Remedy's performance and its ability to achieve Performance Standards. The petition shall also demonstrate that the remedy has been designed, constructed and operated in a manner which is consistent with the RD/RA Work Plan and the conceptual models for Site contamination, and that the system has been modified or enhanced as contemplated in the ROD, the SOW, or this Consent Decree to the extent practicable to optimize its performance in an effort to attain the Performance

Standards.

- (4) A description of the conceptual model for Site contamination, including geologic, hydrogeologic, and geochemical characterizations and a description of the distribution, characteristics, migration, potential migration and fate, and quantities of contaminants present at the Site. These descriptions shall incorporate pertinent data obtained during the design, construction, and operations of the remedial system, as well as information obtained during previous Site characterization efforts.
- An analysis of the performance of the SGZ Remedy which describes the spatial and temporal trends in groundwater contaminant concentrations within the SGZ plume; for example, whether contaminant migration has been effectively prevented, as well as any reductions or changes in the overall size or location of the SGZ plume, or stabilized or very slow decreases in contaminant concentrations. The petition shall discuss the hydrogeochemical factors which influence the remedy's ability to achieve the Performance Standards, and demonstrate how these factors inhibit the remedial system achieving the Performance Standards.
- (6) An estimate of the mass of contaminants removed from the SGZ by the

 Groundwater Treatment System, and an estimate of the mass of contaminants
 remaining, including the degree of uncertainty involved in this estimate.
- (7) A demonstration, including appropriate engineering analysis, that other conventional or innovative technologies which are potentially applicable at the

- Site cannot attain the Performance Standards in a manner that is practicable from an engineering perspective. This demonstration should include a prediction of the level of cleanup other technologies can attain.
- (8) A predictive analysis of the approximate time frame required to achieve the Performance Standards with the Groundwater Treatment System, as it may be modified pursuant to this Consent Decree and the SOW, and any alternative remedial strategies, if applicable, using methods appropriate for the data and the site-specific conditions. Such analyses should also address the uncertainty inherent in these predictions.
- (9) For the implemented SGZ Remedy outside of the TI Zone and for any alternative remedial strategies proposed as part of this petition, identification of the potential pathways by which humans and the environment are or may become exposed to the contaminated groundwater left in place. Contaminant concentration and other data needed for EPA to perform risk analyses shall be provided as part of the petition.
- (10) A description of the proposed alternative remedial strategy, or a comparison of two or more strategy options, proposed to be implemented by Settling Defendants if a waiver is granted, and the level of cleanup and control of hazardous substances, pollutants, and contaminants the proposed alternative strategy or strategies will attain. Alternative remedial strategies must attain a level of cleanup and control of further releases which ensure protection of human health and the environment, and attain Performance Standards as they may be modified

pursuant to Paragraph 13.c. Alternative remedial strategies may include the establishment of alternate Performance Standards, site-specific cleanup levels, and other alternative remediation requirements to ensure protectiveness. Proposed modifications to the Groundwater Treatment System, as it may be modified pursuant to this Consent Decree or the \$OW, and any additional response actions proposed to be undertaken, shall be described by Settling Defendants in detail. EPA will make the final determination regarding the components of the alternative remedial strategy which shall be implemented at the Site by Settling Defendants.

- (11) A description of any additional groundwater monitoring required to verify compliance with the alternative Performance Standards or remedial requirements.

 EPA will make the final determination regarding the scope of the groundwater monitoring requirements under the alternative remedial strategy.
- (12) Other information or analyses not included above, but which, consistent with published EPA guidance, Settling Defendants or EPA considers appropriate to making a determination on the petition.

c. <u>EPA Petition Determination</u>.

Upon receipt of all information required by Subparagraph 13.b. above,
EPA will review and consider the information in the petition and any other relevant
information. After the opportunity for review and comment by the State of Arizona, EPA
will determine (1) whether compliance with any of the Performance Standards shall be
waived; (2) what, if any, alternative remediation requirements, including alternative

Performance Standards and other protective measures will be established by EPA; (3) whether modifications to the Groundwater Treatment System, as it may be enhanced pursuant to the SOW, or any additional response actions relating to groundwater contamination are required; and (4) whether revised interim milestones and completion dates are needed for attainment of Performance Standards or alternative Performance Standards under this Consent Decree. EPA's determination on the petition will be consistent with the NCP, Section 121(d) of CERCLA, and any other applicable laws, regulations and guidance in effect at the time.

d. Withdrawal of Petition and Non-Obligation to Perform.

Prior to issuing EPA's determination on the petition, as provided in Paragraph 13.c. above, EPA shall issue to Settling Defendants a draft determination. If Settling Defendants and EPA fail to agree upon Settling Defendants obligations to undertake any additional response actions, Performance Standards, modifications to the Groundwater Treatment System or revised interim milestones or completion dates set forth in EPA's draft determination, Settling Defendants may withdraw their petition as if it had never been submitted.

e. <u>Documentation of Petition Determination</u>.

If Settling Defendants do not withdraw their petition pursuant to Paragraph 13.d. and if EPA, after reasonable opportunity for review and comment by the State of Arizona, grants any petition or other relief pursuant to this Paragraph 13, that decision will be reflected in a post-ROD decision document. EPA may document in an Explanation of Significant Differences ("ESD") any modification to the ROD necessary

to implement its decision under this Paragraph 13, unless EPA determines that the technology that will be employed to implement its decision is fundamentally different from the technology employed at the time of the petition. If modification of this Consent Decree or the Statement of Work is required to implement EPA's decision, such modification will be filed and, if necessary, court approval will be sought in accordance with Section XXXI of this Consent Decree ("Modification"). In the event that court approval is sought for such Modification, Settling Defendants agree to jointly submit the modification.

f. Implementation of Modifications.

Upon issuance of EPA's post-ROD decision document pursuant to this Paragraph 13, and if necessary, filing of the revised Statement of Work and Consent Decree with the Court and issuance of a court order approving the modification, Settling Defendants shall implement the modifications selected by EPA to the SGZ Remedy or additional response actions relating to the SGZ Remedy, and necessary to achieve and maintain all Performance Standards, alternative Performance Standards, and remediation requirements established pursuant to this Section. Unless expressly modified by EPA's decision on the petition submitted hereunder, all requirements of this Consent Decree, including Settling Defendants' obligation to achieve the alternative Performance Standards and to conduct long-term groundwater monitoring, shall continue in full force and effect.

g. Effect of EPA's Petition Determination.

Except as provided in Paragraph 13.d., above, Settling Defendants hereby

agree that they will be bound by, and will not challenge, EPA's decision regarding any technical impracticability waiver petition submitted pursuant to this Paragraph 13 or any ROD modification made pursuant thereto.

- 14. Modification of the SOW or Related Work Plans.
- a. Standard for Modification of the SOW.

If EPA determines that modification to the work specified in the SOW and/or in work plans developed pursuant to the SOW is necessary to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the ROD, EPA may require that such modification be incorporated in the SOW and/or such work plans. Provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected in the ROD.

b. Scope of the Remedy.

For the purposes of this Paragraph 14 and Paragraphs 47 (Completion of the Remedial Action), and 48 (Completion of the Work) only, the "scope of the remedy selected in the ROD" shall mean all activities required by or pursuant to this Consent Decree, the ROD and/or the SOW for the SVE Remedy, the SGZ Remedy, the PCB Soils Remedy and the TAA Landfill Remedy.

c. Objections to Modifications.

If Settling Defendants object to any modification determined by EPA to be necessary pursuant to this Paragraph, they may seek dispute resolution pursuant to SectionXIX (Dispute Resolution). The SOW and/or related work plans shall be modified

in accordance with final resolution of the dispute.

d. <u>Implementation of Modifications</u>.

Settling Defendants shall implement any work required by any modifications incorporated in the SOW and/or in work plans developed pursuant to the SOW in accordance with this Paragraph.

c. Other Response Actions.

Except as otherwise provided in this Consent Decree, nothing in this

Paragraph shall be construed to limit EPA's authority to require performance of further
response actions as otherwise provided in this Consent Decree.

15. Settling Defendants acknowledge and agree that nothing in this Consent Decree, the SOW, or the Remedial Design or Remedial Action Work Plans constitutes a warranty or representation of any kind that compliance with the work requirements set forth in the SOW and the Work Plans will achieve the Performance Standards.

16. Notification of Out-of-State Shipment of Waste Material.

Settling Defendants shall, prior to any shipment of Waste Material generated pursuant to the Work from the Site to an out-of-state waste management facility, provide written notification to the director of the environmental department of the State in which the receiving facility is located and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any out-of-state shipments when the total volume of such shipments during any three month period does not exceed 15 cubic yards.

- a. Settling Defendants shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Settling Defendants shall notify the director of the environmental department of the State in which the receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material generated by the Work to another facility within the same state, or to a facility in another state.
- b. The identity of the receiving facility and state will be determined by Settling Defendants following the award of any contract for Remedial Action construction for which out-of-state shipment of Hazardous Waste Material is called for or required. Settling Defendants shall provide the information required by Paragraph 16.a as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

VII. REMEDY REVIEW

17. Periodic Review.

Settling Defendants shall conduct any studies and investigations as requested by EPA in writing, in order to permit EPA to conduct reviews of whether the Remedial Action is protective of human health and the environment at least every five years as required by Section 121(c) of CERCLA and any applicable regulations. EPA's request will describe the purpose and scope and schedule for such studies and investigations. Within thirty (30) calendar days following such request, EPA and Settling

Defendants shall consult and confer to define the scope of such studies and investigations to assure that the costs of such studies and investigations are not clearly excessive in light of their purpose.

18. EPA Selection of Further Response Actions.

If EPA determines, at any time, that the Remedial Action selected in the ROD is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP.

19. Opportunity To Comment.

Settling Defendants and, if required by Sections 113(k)(2) or 117 of CERCLA, the public will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

20. Settling Defendants' Obligation To Perform Further Response
Actions.

If EPA selects further response actions for any one or more of the areas described on Appendices L-1 and L-2 or for any area to which contaminants located within such areas have migrated, pursuant to this Section VII (Remedy Review), Settling Defendants shall undertake such further response actions with respect to any contaminant identified on Appendix M, and any byproduct or breakdown product of any such contaminant, to the extent that the reopener conditions in Paragraphs 82 (Pre-Certification

Reservations) or 83 (Post-Certification Reservations) are satisfied. Settling Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraph 82 (Pre-Certification) or Paragraph 83 (Post-Certification) are satisfied, (2) EPA's determination that the Remedial Action is not protective of human health and the environment, or (3) EPA's selection of the further response actions. Disputes pertaining to whether the Remedial Action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 66 (Formal Dispute with Record Review).

21. Submissions of Plans.

If Settling Defendants agree or are required to perform the further response actions selected pursuant to Paragraph 18, they shall submit a plan for such work to EPA. for approval in accordance with the procedures set forth in Section VI (Performance of the Work by Settling Defendants) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

VIII. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

22. Settling Defendants shall use quality assurance, quality control, and chain of custody procedures for all treatability or field investigation, design, compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (EPA QA/R5; "Preparing Perfect Project Plans," (EPA /600/9-88/087)), and subsequent amendments to such guidelines upon notification by EPA to Settling Defendants of such amendment.

Amended guidelines shall apply only to procedures conducted after such notification.

Prior to the commencement of any monitoring project under this Consent Decree, Settling Defendants shall submit to EPA for approval, a Quality Assurance Project Plan ("QAPP") that is consistent with the SOW, the NCP and applicable guidance documents. Settling Defendants may utilize, to the extent practicable, quality assurance documents that have been approved by EPA for use at the Site under Unilateral Administrative Order #92-09. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Defendants shall include in all contracts with laboratories that EPA personnel and authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling Defendants in implementing this Consent Decree. Settling Defendants shall instruct all laboratories to analyze all samples submitted by EPA pursuant to the OAPP for quality assurance monitoring. Settling Defendants shall instruct the laboratories they utilize for the analysis of samples taken pursuant to this Decree to perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are approved by EPA and include Routine Analytical Services (SW-846) and any amendments made thereto during the course of the implementation of this Consent Decree. Settling Defendants shall retain laboratories for analysis of samples taken pursuant to this Consent Decree that participate in an EPA or EPA-equivalent OA/OC program. All field methodologies utilized in collecting samples for subsequent analysis pursuant to this Decree will be conducted in accordance with the procedures set forth in the QAPP approved by EPA.

- samples to be taken by EPA or its authorized representatives. Settling Defendants shall notify EPA not less than twenty (20) days in advance of any such sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Settling Defendants to take split or duplicate samples of any samples they take as part of Plaintiff's oversight of the Settling Defendants' implementation of the Work. In the event that EPA requests split samples from samples collected by Settling Defendants, EPA shall request such split samples from Settling Defendants not less than ten (10) days prior to such sampling activity; provided, however, that such notification obligation shall not be construed to obligate EPA to notify Settling Defendants in advance of any other sampling activities. Within five (5) calendar days following such request, EPA and Settling Defendants shall consult and confer to define the scope of such split sampling to assure that the cost of such split sampling is not clearly excessive in light of its purpose.
- 24. Settling Defendants shall submit to EPA and the Arizona

 Department of Environmental Quality, respectively, two (2) copies of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Settling Defendants with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.
- 25. Notwithstanding any provision of this Consent Decree, Plaintiff
 hereby retains all of its information gathering and inspection authorities and rights,
 including enforcement actions related thereto, under CERCLA, RCRA and any other

applicable statutes or regulations.

IX. ACCESS AND INSTITUTIONAL CONTROLS

26. Airport Property

a. Access.

Subject to the requirements of Part 107 of the Federal Aviation

Regulations with respect to airport security, commencing on the Effective Date of this

Consent Decree, City and TAA shall provide the United States and its representatives,
including EPA and its contractors, and the State, including ADEQ and its contractors,
with access at all reasonable times to the Airport Property for the purpose of conducting
any activity related to this Consent Decree including, but not limited to, the following
activities:

- i) monitoring the Work;
- ii) verifying any data or information submitted to the United States;
- iii) conducting investigations relating to contamination at or near the Airport Property;
- iv) obtaining samples;
- v) assessing the need for, planning, or implementing additional response actions at or near the Airport Property or the Site;
- vi) implementing the Work pursuant to conditions set forth in Paragraphs 86 or 87 of this Consent Decree:
- vii) inspecting and copying records, operating logs, contracts, or other documents maintained or generated at the Site by Settling Defendants or their agents,

consistent with Sections XXIV and XXV;

- viii) assessing Settling Defendants' compliance with this Consent Decree; and
- determining whether the Airport Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, pursuant to this Consent Decree.

b. Use Restrictions.

Commencing on the Effective Date of this Consent Decree, Settling Defendants shall refrain from using the Restricted Airport Property in any manner that would interfere with or adversely affect the integrity or protectiveness of the Remedial Action to be implemented pursuant to this Consent Decree ("Use Restrictions").

c. Existing Restrictions.

The City and TAA hereby certify that TAA manages and operates the Airport

Property pursuant to that certain Lease Agreement dated October 14, 1948 between TAA

and the City, which requires that the Airport Property function as a public airport. TAA

certifies that the Airport Property is further dedicated to airport use through various

covenants and assurances with the Federal Aviation Administration.

27. Off-Airport Property.

a. Access

If access to Off-Airport Property is deemed necessary by EPA to implement the Remedial Action, the Settling Defendants shall use their best efforts to secure from the owners of such Off-Airport Property:

(i) An agreement to provide access to such Off-Airport Property for Settling

Defendants, as well as for the United States on behalf of EPA, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 26(a)(i)-(ix) of the Consent Decree;

- (ii) An agreement, enforceable by the Settling Defendants and the United States, to abide by the obligations and restrictions established by subparagraph (i) above with respect to such property or that are otherwise necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree; and/or
- (iii) If such access is requested for more than one year, the execution and recordation in the County Recorder's Office of an easement running with the land for such Off-Airport Property that grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 26(a)(i) (ix) of this Consent Decree, including a right of non-interference with the property right arising from such easement granted to the Settling Defendants and their representatives, in accordance with this paragraph. In the event of any refusal to grant EPA, its representatives and/or the State and its representatives access pursuant to an access easement obtained pursuant to this Paragraph, Settling Defendants shall enforce such access easements on behalf of EPA and the State.
- b. Within forty-five (45) days of the date on which EPA deems that access is needed, if such access must be obtained pursuant to subparagraph a(iii) above,

Settling Defendants shall submit to EPA for review and approval with respect to such property the following:

- i) A draft easement in substantially the form attached hereto as <u>Appendix I</u> that is enforceable under the laws of the State of Arizona, free and clear of all prior liens and encumbrances (except as approved by EPA), and
- ii) a current title commitment or report.

Within 15 days of EPA's approval of the easement, Settling Defendants shall update the title search and, if nothing has occurred to adversely affect the title since the effective date of the commitment or report, record the easement with the County Recorder's Office. Within thirty (30) days of recording such easement, Settling Defendants shall provide EPA with a copy of the original recorded easement showing the clerk's recording stamp.

c. For purposes of Paragraph 27.a. of this Consent Decree, "best efforts" includes the payment of reasonable sums of money in consideration of the access and/or access easements being sought, not to exceed the fair market value thereof. If any instrument or easement required by Paragraph 27 of this Consent Decree are not submitted to EPA in draft form within forty-five (45) days following the date on which EPA determines that such easements are necessary. Settling Defendants shall promptly notify the United States in writing, and shall include in that notification a summary of the steps Settling Defendants have taken to attempt to comply with this Section IX. The United States may, as it deems appropriate, assist Settling Defendants in obtaining access or use restrictions, either in the form of contractual agreements or in the form of

easements running with the land. Settling Defendants shall reimburse the United States in accordance with the procedures in Section XVI (Reimbursement of Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining access including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

- 28. If EPA determines that use restrictions in the form of State or local laws, regulations ordinances or other governmental controls are needed to implement the remedy selected in the ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Settling Defendants shall cooperate with EPA's efforts to secure such governmental controls. Nothing herein shall be construed as binding the City Council of the City of Tucson, as it exists on the Effective Date and/or as it may come to be constituted thereafter, to take any specific legislative act.
- 29. Notwithstanding any provision of this Consent Decree, Plaintiff retains all of its access authorities and rights, as well as all of its rights to require use restrictions on real property or groundwater, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

X. REPORTING REQUIREMENTS

30. In addition to any other requirement of this Consent Decree, commencing on the Effective Date of this Consent Decree and continuing until construction has been certified as complete for all of the Individual Remedies pursuant to Section 5.0 of the SOW, Settling Defendants shall submit to EPA and ADEQ, respectively, two (2) copies of written Progress Reports on a monthly basis. Thereafter,

Settling Defendants shall submit to EPA and ADEQ two (2) copies of written progress reports on a semi-annual basis for two years and thereafter on an annual basis.

The Progress Reports shall: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous reporting period; (b) include a summary of all results of sampling and tests and all other data received or generated by Settling Defendants or their contractors or agents in the previous reporting period; (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted during the previous reporting period; (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next reporting period and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts; (e) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (f) include any modifications to the work plans or other schedules that Settling Defendants have proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan during the previous reporting period and those to be undertaken in the next reporting period.

Settling Defendants shall submit these Progress Reports to EPA by the tenth day after the end of each reporting period, until EPA notifies the Settling Defendants pursuant to Paragraph 47.b. of Section XIV (Certification of Completion of

Remedial Action) and thereafter by the tenth day after the end of the applicable reporting period specified above or until EPA has approved data submitted by Settling Defendants that indicate that no further monitoring is required by the ROD, this Consent Decree, or the SOW. If requested by EPA, Settling Defendants shall also provide briefings for EPA to discuss the progress of the Work.

- 31. Settling Defendants shall notify EPA of any change in the schedule described in the Progress Report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than seven days prior to the performance of the activity.
- that Settling Defendants are required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), Settling Defendants shall, within 24 hours of their learning of such event, orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Emergency Response Section, Region IX, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.
- 33. Within twenty (20) days of the onset of such an event, Settling

 Defendants shall furnish to EPA and ADEQ a written report, signed by Settling

 Defendants' Project Coordinator, setting forth the events which occurred and the

measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Settling Defendants shall submit a report setting forth all actions taken in response thereto.

- 34. Settling Defendants shall submit two (2) copies of all plans, reports, data, Progress Reports, and other Deliverables required by the SOW, the Remedial Design Work Plan, the Remedial Action Work Plan, or any other approved plans to EPA and ADEQ in accordance with the schedules set forth in the SOW, or such plans.
- 35. All reports and other documents submitted by Settling Defendants to EPA (other than the Progress Reports referred to above) which purport to document Settling Defendants' compliance with the terms of this Consent Decree shall be signed by an authorized representative of Settling Defendants. Upon request by EPA, Settling Defendants shall submit in electronic form any plan, data, Progress Report, or other Deliverables submitted pursuant to this Section.

XI. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

36. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Settling Defendants modify the submission; or (e) any combination of the above. However, prior to modifying or disapproving a submission EPA shall provide Settling Defendants (i) with a first notice of deficiency and an

opportunity to cure within twenty (20) days ("First Resubmittal"), and, (ii) if EPA finds

Settling Defendants' First Resubmittal deficient, a second opportunity to cure within ten

(10) days ("Second Resubmittal") except where to comply with this procedure would

cause serious disruption to the Work or where previous submission(s) have been

disapproved due to material defects and the deficiencies in the submission under

consideration indicate a bad faith lack of effort to submit an acceptable Deliverable. EPA

may specify a longer time for submitting a First Resubmittal or a Second Resubmittal.

37. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 36(a), (b), or (c) of this Section XI, Settling Defendants shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XIX (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the Second Resubmittal to cure the deficiencies pursuant to Paragraph 36(c) of this Section XI and the Second Resubmittal had a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XX (Stipulated Penalties).

38. Notice of Disapproval.

a. Upon receipt of a notice of disapproval of a Second Resubmittal pursuant to Paragraph 36(d) ("Final Disapproval"), Settling Defendants shall within twenty (20) days or such longer time as specified by EPA in such Final Disapproval notice correct the deficiencies and resubmit the plan, report or other item for approval ("Final Resubmittal"). Any stipulated penalties applicable to the Second Resubmittal, as

provided in Section XX, shall accrue following receipt of a Final Disapproval but shall not be payable unless the Final Resubmittal is disapproved or modified due to a material defect as provided in Paragraphs 39 and 40 of this Section.

- b. Notwithstanding the receipt of a Final Disapproval pursuant to

 Paragraph 36(d) of this Section, Settling Defendants shall proceed, at the direction of

 EPA, to take any action required by any non-deficient portion of the submission.

 Implementation of any non-deficient portion of a submission shall not relieve Settling

 Defendants of any liability for stipulated penalties under Section XX (Stipulated

 Penalties) for any deficient portion of such submission.
- 39. If after a Final Resubmittal, the deficiencies remain, EPA has the right to modify or develop the plan, report or other item. Settling Defendants shall implement any such plan, report, or item as modified or developed by EPA, subject only to their right to invoke the procedures set forth in Section XIX (Dispute Resolution).
- 40. If a Final Resubmittal is disapproved or modified by EPA due to a material defect, Settling Defendants shall be deemed to have failed to submit such Final Resubmittal timely and adequately unless Settling Defendants invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XIX (Dispute Resolution) and Section XX (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties as provided in Section XX, shall accrue for such violation from the date on which the Second Resubmittal was due

pursuant to Paragraph 36.

41. All Deliverables required to be submitted to EPA under this

Consent Decree shall, upon approval or modification by EPA, be enforceable under this

Consent Decree. In the event EPA approves or modifies a portion of a Deliverable
required to be submitted to EPA under this Consent Decree, the approved or modified
portion shall be enforceable under this Consent Decree.

XII. PROJECT COORDINATORS

- 42. Settling Defendants and EPA have notified each other, in writing, of the name, address and telephone number of their respective designated Project Coordinators and Alternate Project Coordinators, and EPA has approved Settling Defendants' Project Coordinator. If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other Parties at least five (5) days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. Settling Defendants' Project Coordinator shall be subject to disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the Work. Settling Defendants' Project Coordinator shall not be an attorney for any of Settling Defendants in this matter. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during the Work.
- 43. Plaintiff may designate other representatives, including, but not limited to, EPA and State employees, and federal and State contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent

Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator or Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when s/he determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

44. EPA's Project Coordinator and Settling Defendants' Project Coordinator will meet (by telephone conference or in person, as appropriate) in accordance with the schedule set forth in the SOW.

XIII. ASSURANCE OF ABILITY TO COMPLETE WORK

- 45. Settling Defendants shall establish and maintain financial security as follows:
 - a. Establishment of Master Remediation Trust.

Prior to the Effective Date, TAA and an institutional trustee shall execute a Master Remediation Trust Fund Agreement, in a form substantially similar to the form attached hereto as Exhibit 1 for reference only and which has been approved as to form by EPA ("Master Trust Agreement") establishing the Master Remediation Trust Fund ("Master Remediation Trust"). Within seven (7) calendar days after TAA receives the payment from the United States as provided in the Settlement Agreement, TAA shall

have deposited \$29,000,000 into the Master Remediation Trust. The Master Trust

Agreement shall authorize the Trustee to use the money in the Master Remediation Trust

for, among other things, funding the Soils Remediation Trust Fund ("Soils Remediation

Trust") established pursuant to Paragraph 45.b below.

- Trust Agreement, TAA shall report or shall require the Trustee to report annually to, among others, EPA. TAA shall submit or require the Trustee to submit its first report on the first day of the second calendar month after the Effective Date of this Consent Decree. Subsequent reports shall be submitted annually thereafter, on the first day of the month in which the first report was submitted. Each report shall contain a current accounting of the amount of money in the Master Remediation Trust. At EPA's discretion, EPA may require quarterly reporting on notice to TAA.
- (ii) If the United States, on behalf of Settling Federal Agency, fails to make the payment to TAA in accordance with the Settlement Agreement and Paragraph 51.a.of this Consent Decree, TAA shall notify the United States pursuant to Section XXVI (Notices and Submissions).

b. Establishment of Soils Remediation Trust.

Prior to the Effective Date, Settling Defendants shall execute a Soils

Remediation Trust Agreement, in a form substantially similar to the form attached hereto
as Exhibit 2, for reference only and which has been approved as to form by EPA ("Soils

Trust Agreement"), establishing the Soils Remediation Trust. The Soils Trust shall be

funded initially as described in Paragraph 45.b.(i) below. The Soils Trust Agreement shall authorize the Trustee to use the money in the Soils Remediation Trust for, among other things: (1) paying the contractor(s) selected to perform the Work; and (2) reimbursing the United States (excluding Settling Federal Agency) for Past, Interim and Future Response Costs as provided in this Consent Decree.

- (i) Initial Funding of the Soils Remediation Trust. The Soils Remediation Trust shall be funded pursuant to the terms of a Soils Participation Agreement ("Soils PA") that shall be entered into by and among Settling Defendants. Within ten (10) days after the Effective Date, TAA, GD, and MD shall have made an initial deposit into the Soils Remediation Trust in the amount of \$1,100,000 pursuant to the terms of the Soils PA. Until the United States, on behalf of Settling Federal Agency, has made its payment to TAA as described in the Settlement Agreement, Settling Defendants shall be required only to perform activities described in section 3.0 of the SOW.
- (ii) Financial Projections and Reporting by Trustee. Pursuant to the Soils Trust Agreement, Settling Defendants shall report or shall require the Trustee to report quarterly to Settling Defendants and to EPA. Settling Defendants shall submit or require the Trustee to submit its first report on the first day of the second calendar month after the Effective Date of this Consent Decree. Subsequent reports shall be submitted quarterly thereafter, on the first day of March, June, September and December. Each report shall contain a projection of all costs that Settling Defendants expect to incur in complying with this Consent

Decree during the two quarters following submission of the report, including

Future Response Costs, as well as a current accounting of the amount of money in

the Soils Remediation Trust.

- (iii) Continuing Funding of the Trust. Settling Defendants shall make deposits into the Soils Remediation Trust that are sufficient to fund adequately the Work and Future Response Costs; provided, however, that no deposits subsequent to the initial deposit specified in Paragraph 45.b.(i) above shall be required to be made by Settling Defendants if the payment by United States on behalf of Settling Federal Agency has not been made as described in the Settlement Agreement.

 Settling Defendants' specific payment obligations and duties to one another are more fully described in the Soils PA. If the total amount on deposit in the Soils Remediation Trust is less than the amount projected in the Trustee's report to be needed to pay for the Work and the estimated Future Response Costs for the next two calendar quarters, Settling Defendants shall deposit sufficient money into the Soils Remediation Trust to replenish it to the balance necessary to make required payments for the following two calendar quarters. Such deposit shall be made by the 30th calendar day of the quarter.
- (iv) <u>City of Tucson</u>. Should TAA fail to make any payment to the Soils Remediation Trust in the amount and at the time required under the Soils Trust Agreement and Soils PA, the City shall make such payment to the Soils Remediation Trust on behalf of TAA within 60 days of the date on which TAA's payment was due.

- Defendant pays any amount in excess of its required payment as defined by the Soils PA, such Settling Defendant may by motion request the Court to enforce such required payment or the provisions of the Soils PA against the defaulting Settling Defendant(s). If the moving party prevails in such motion, it shall be entitled to the award of reasonable attorneys' fees and costs incurred in enforcing the defaulting Settling Defendant's(s') payment obligations, plus interest at the rate most recently publicly announced in the Wall Street Journal (Western Edition) as the "prime rate," or, if the Wall Street Journal is not in circulation at the time, then the rate of interest most recently announced as the "prime rate" by such alternative source as is chosen by the prevailing party, provided that such source is one that is then publicly available and commonly used by institutional lenders in making such determinations.
- remaining Work under this Consent Decree and the TARP Consent Decree is less than the amount remaining in the Master Remediation Trust after the Effective Date of this Consent Decree, TAA may, on any anniversary date of the Effective Date of this Consent Decree, or at any other time agreed to by EPA and TAA, reduce the amount of the financial security provided under this Section by withdrawing the interest income on such amounts, provided that after any such withdrawal, the amount in the Master Remediation Trust is sufficient to fund the estimated cost of the remaining Work to be performed under both this Consent

Decree and the TARP Consent Decree. TAA shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section XIII, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, TAA may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

XIV. CERTIFICATION OF COMPLETION

- 47. Completion of the Remedial Action.
- a. Pursuant to this Paragraph 47, Settling Defendants may seek a

 Certification of Completion of the Remedial Action for each Individual Remedy.
- b. Within ninety (90) calendar days after Settling Defendants conclude that the Remedial Action has been fully performed for an Individual Remedy and the Performance Standards have been fully attained, Settling Defendants shall schedule and conduct a pre-certification inspection of the Individual Remedy to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, Settling Defendants still believe that the Remedial Action for the Individual Remedy has been fully performed and the Performance Standards have been fully attained, then Settling Defendants shall submit to EPA a written report requesting certification of approval for the Individual Remedy, pursuant to Section XI (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, Settling Defendants' Project Coordinator shall state that the Remedial Action for the Individual Remedy has been completed in full satisfaction of the requirements of this Consent Decree. The

written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State of Arizona, determines that the Remedial Action for the Individual Remedy or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards have not been achieved, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Remedial Action and attain the Performance Standards for the Individual Remedy. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to their right to invoke the dispute

resolution procedures set forth in Section XIX (Dispute Resolution).

c. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion, that the Remedial Action for an Individual Remedy has been performed in accordance with this Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Defendants. This certification shall constitute the "Certification of Completion of Remedial Action" for an Individual Remedy for purposes of this Consent Decree, including, but not limited to, Section XXI (Covenants by United States). Upon obtaining a Certification of Completion of Remedial Action for an Individual Remedy, the Post-Certification Reservations of Paragraph 83 shall apply with respect to that Individual Remedy. Certification of Completion of Remedial Action for an Individual Remedy shall not affect Settling Defendants' other obligations under this Consent Decree.

- 48. Completion of the Work.
- a. Pursuant to this Paragraph 48, Settling Defendants may seek a Certification of Completion of the Work for each Individual Remedy.
- b. Within ninety (90) calendar days after Settling Defendants conclude that all phases of the Work for an Individual Remedy (including O&M) have been fully performed, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, Settling Defendants still believe that the Work for such Individual Remedy has been fully performed, Settling Defendants shall submit a written report by Settling

Defendants' Project Coordinator stating that the Work for the Individual Remedy has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after review of the written report, EPA determines that any portion of the Work for the Individual Remedy has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Work for such Individual Remedy. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to their right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

c. If EPA concludes, based on the initial or any subsequent request

for Certification of Completion by Settling Defendants, that the Work for such Individual Remedy has been performed in accordance with this Consent Decree, EPA will so notify Settling Defendants in writing.

XV. EMERGENCY RESPONSE

In the event of any action or occurrence resulting from the 49. performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment, Settling Defendants shall, subject to Paragraph 50 of this Section XV, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA's Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, Settling Defendants shall notify the EPA Emergency Response Unit, Region IX. Settling Defendants shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Defendants fail to take appropriate response action as required by this Section XV, and EPA takes such action instead, Settling Defendants shall reimburse EPA for all costs of the response action not inconsistent with the NCP pursuant to Section XVI (Reimbursement of Response Costs). To the extent that events occur which are otherwise reported pursuant to the SOW or any approved plan developed pursuant to the SOW, such events shall not be subject to the reporting requirements of this Paragraph

shall be deemed to limit any authority of Plaintiff: a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XXI (Covenants by United States).

XVI. PAYMENTS BY UNITED STATES AND SETTLING DEFENDANTS

- 51. Payment by United States on Behalf of Settling Federal Agency.
- a. Consistent with Paragraph 51.b below, the United States, on behalf of Settling Federal Agency, shall pay to TAA the amount specified in the Settlement Agreement. Settling Federal Agency's obligations under this Consent Decree shall be satisfied upon such payment by the United States, on behalf of Settling Federal Agency, to TAA as provided in the Settlement Agreement and this Paragraph 51.a. If the required payment to TAA is not made within 120 days after the Effective Date, EPA and Department of Justice shall resolve the issue within 30 days in accordance with the letter agreement dated December 28, 1998. Payment of funds to TAAshall not be considered a fine, penalty or monetary sanction. The Parties agree that no specific allocation of funds from the above-referenced payment has been agreed upon, shall be made or is required in order to satisfy the obligations pursuant to this Consent Decree.

have deposited \$29,000,000 into the Master Remediation Trust. The Master Trust

Agreement shall authorize the Trustee to use the money in the Master Remediation Trust

for, among other things, funding the Soils Remediation Trust Fund ("Soils Remediation

Trust") established pursuant to Paragraph 45.b below.

- Trust Agreement, TAA shall report or shall require the Trustee to report annually to, among others, EPA. TAA shall submit or require the Trustee to submit its first report on the first day of the second calendar month after the Effective Date of this Consent Decree. Subsequent reports shall be submitted annually thereafter, on the first day of the month in which the first report was submitted. Each report shall contain a current accounting of the amount of money in the Master Remediation Trust. At EPA's discretion, EPA may require quarterly reporting on notice to TAA.
- (ii) If the United States, on behalf of Settling Federal Agency, fails to make the payment to TAA in accordance with the Settlement Agreement and Paragraph 51.a.of this Consent Decree, TAA shall notify the United States pursuant to Section XXVI (Notices and Submissions).

b. <u>Establishment of Soils Remediation Trust.</u>

Prior to the Effective Date, Settling Defendants shall execute a Soils

Remediation Trust Agreement, in a form substantially similar to the form attached hereto
as Exhibit 2, for reference only and which has been approved as to form by EPA ("Soils

Trust Agreement"), establishing the Soils Remediation Trust. The Soils Trust shall be

funded initially as described in Paragraph 45.b.(i) below. The Soils Trust Agreement shall authorize the Trustee to use the money in the Soils Remediation Trust for, among other things: (1) paying the contractor(s) selected to perform the Work; and (2) reimbursing the United States (excluding Settling Federal Agency) for Past, Interim and Future Response Costs as provided in this Consent Decree.

- (i) Initial Funding of the Soils Remediation Trust. The Soils Remediation Trust shall be funded pursuant to the terms of a Soils Participation Agreement ("Soils PA") that shall be entered into by and among Settling Defendants. Within ten (10) days after the Effective Date, TAA, GD, and MD shall have made an initial deposit into the Soils Remediation Trust in the amount of \$1,100,000 pursuant to the terms of the Soils PA. Until the United States, on behalf of Settling Federal Agency, has made its payment to TAA as described in the Settlement Agreement, Settling Defendants shall be required only to perform activities described in section 3.0 of the \$OW.
- (ii) Financial Projections and Reporting by Trustee. Pursuant to the Soils Trust Agreement, Settling Defendants shall report or shall require the Trustee to report quarterly to Settling Defendants and to EPA. Settling Defendants shall submit or require the Trustee to submit its first report on the first day of the second calendar month after the Effective Date of this Consent Decree. Subsequent reports shall be submitted quarterly thereafter, on the first day of March, June, September and December. Each report shall contain a projection of all costs that Settling Defendants expect to incur in complying with this Consent

Decree during the two quarters following submission of the report, including

Future Response Costs, as well as a current accounting of the amount of money in
the Soils Remediation Trust.

- (iii) Continuing Funding of the Trust. Settling Defendants shall make deposits into the Soils Remediation Trust that are sufficient to fund adequately the Work and Future Response Costs; provided, however, that no deposits subsequent to the initial deposit specified in Paragraph 45.b.(i) above shall be required to be made by Settling Defendants if the payment by United States on behalf of Settling Federal Agency has not been made as described in the Settlement Agreement.

 Settling Defendants' specific payment obligations and duties to one another are more fully described in the Soils PA. If the total amount on deposit in the Soils Remediation Trust is less than the amount projected in the Trustee's report to be needed to pay for the Work and the estimated Future Response Costs for the next two calendar quarters, Settling Defendants shall deposit sufficient money into the Soils Remediation Trust to replenish it to the balance necessary to make required payments for the following two calendar quarters. Such deposit shall be made by the 30th calendar day of the quarter.
- (iv) <u>City of Tucson</u>. Should TAA fail to make any payment to the Soils Remediation Trust in the amount and at the time required under the Soils Trust Agreement and Soils PA, the City shall make such payment to the Soils Remediation Trust on behalf of TAA within 60 days of the date on which TAA's payment was due.

- Defendant pays any amount in excess of its required payment as defined by the Soils PA, such Settling Defendant may by motion request the Court to enforce such required payment or the provisions of the Soils PA against the defaulting Settling Defendant(s). If the moving party prevails in such motion, it shall be entitled to the award of reasonable attorneys' fees and costs incurred in enforcing the defaulting Settling Defendant's(s') payment obligations, plus interest at the rate most recently publicly announced in the Wall Street Journal (Western Edition) as the "prime rate," or, if the Wall Street Journal is not in circulation at the time, then the rate of interest most recently announced as the "prime rate" by such alternative source as is chosen by the prevailing party, provided that such source is one that is then publicly available and commonly used by institutional lenders in making such determinations.
- remaining Work under this Consent Decree and the TARP Consent Decree is less than the amount remaining in the Master Remediation Trust after the Effective Date of this Consent Decree, TAA may, on any anniversary date of the Effective Date of this Consent Decree, or at any other time agreed to by EPA and TAA, reduce the amount of the financial security provided under this Section by withdrawing the interest income on such amounts, provided that after any such withdrawal, the amount in the Master Remediation Trust is sufficient to fund the estimated cost of the remaining Work to be performed under both this Consent

Decree and the TARP Consent Decree. TAA shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section XIII, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, TAA may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

XIV. CERTIFICATION OF COMPLETION

- 47. Completion of the Remedial Action.
- a. Pursuant to this Paragraph 47, Settling Defendants may seek a Certification of Completion of the Remedial Action for each Individual Remedy.
- b. Within ninety (90) calendar days after Settling Defendants conclude that the Remedial Action has been fully performed for an Individual Remedy and the Performance Standards have been fully attained, Settling Defendants shall schedule and conduct a pre-certification inspection of the Individual Remedy to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, Settling Defendants still believe that the Remedial Action for the Individual Remedy has been fully performed and the Performance Standards have been fully attained, then Settling Defendants shall submit to EPA a written report requesting certification of approval for the Individual Remedy, pursuant to Section XI (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, Settling Defendants' Project Coordinator shall state that the Remedial Action for the Individual Remedy has been completed in full satisfaction of the requirements of this Consent Decree. The

written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State of Arizona, determines that the Remedial Action for the Individual Remedy or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards have not been achieved, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Remedial Action and attain the Performance Standards for the Individual Remedy. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to their right to invoke the dispute

resolution procedures set forth in Section XIX (Dispute Resolution).

c. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion, that the Remedial Action for an Individual Remedy has been performed in accordance with this Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Defendants. This certification shall constitute the "Certification of Completion of Remedial Action" for an Individual Remedy for purposes of this Consent Decree, including, but not limited to, Section XXI (Covenants by United States). Upon obtaining a Certification of Completion of Remedial Action for an Individual Remedy, the Post-Certification Reservations of Paragraph 83 shall apply with respect to that Individual Remedy. Certification of Completion of Remedial Action for an Individual Remedy shall not affect Settling Defendants' other obligations under this Consent Decree.

48. Completion of the Work.

- a. Pursuant to this Paragraph 48, Settling Defendants may seek a Certification of Completion of the Work for each Individual Remedy.
- b. Within ninety (90) calendar days after Settling Defendants conclude that all phases of the Work for an Individual Remedy (including O&M) have been fully performed, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, Settling Defendants still believe that the Work for such Individual Remedy has been fully performed, Settling Defendants shall submit a written report by Settling

Defendants' Project Coordinator stating that the Work for the Individual Remedy has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after review of the written report, EPA determines that any portion of the Work for the Individual Remedy has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Work for such Individual Remedy. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to their right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

c. If EPA concludes, based on the initial or any subsequent request

for Certification of Completion by Settling Defendants, that the Work for such Individual Remedy has been performed in accordance with this Consent Decree, EPA will so notify Settling Defendants in writing.

XV. EMERGENCY RESPONSE

In the event of any action or occurrence resulting from the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment, Settling Defendants shall, subject to Paragraph 50 of this Section XV, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA's Project Coordinator. or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, Settling Defendants shall notify the EPA Emergency Response Unit, Region IX. Settling Defendants shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Defendants fail to take appropriate response action as required by this Section XV, and EPA takes such action instead, Settling Defendants shall reimburse EPA for all costs of the response action not inconsistent with the NCP pursuant to Section XVI (Reimbursement of Response Costs). To the extent that events occur which are otherwise reported pursuant to the SOW or any approved plan developed pursuant to the SOW, such events shall not be subject to the reporting requirements of this Paragraph

shall be deemed to limit any authority of Plaintiff: a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XXI (Covenants by United States).

XVI. PAYMENTS BY UNITED STATES AND SETTLING DEFENDANTS

- 51. Payment by United States on Behalf of Settling Federal Agency.
- a. Consistent with Paragraph 51.b below, the United States, on behalf of Settling Federal Agency, shall pay to TAA the amount specified in the Settlement Agreement. Settling Federal Agency's obligations under this Consent Decree shall be satisfied upon such payment by the United States, on behalf of Settling Federal Agency, to TAA as provided in the Settlement Agreement and this Paragraph 51.a. If the required payment to TAA is not made within 120 days after the Effective Date, EPA and Department of Justice shall resolve the issue within 30 days in accordance with the letter agreement dated December 28, 1998. Payment of funds to TAAshall not be considered a fine, penalty or monetary sanction. The Parties agree that no specific allocation of funds from the above-referenced payment has been agreed upon, shall be made or is required in order to satisfy the obligations pursuant to this Consent Decree.

b. Anti-Deficiency Act.

The Parties to this Consent Decree recognize and acknowledge that the payment obligations of the United States on behalf of Settling Federal Agency pursuant to the Settlement Agreement and in satisfaction of this Paragraph 51 can only be paid from appropriated funds legally available for such purpose. Nothing in this Consent Decree shall be interpreted or construed as a commitment or requirement that the United States on behalf of Settling Federal Agency obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §§ 1301, 1341, or any other applicable provision of law.

- 52. Payment of Past Response Costs by Settling Defendants.

payment has been made to the United States as specified in Section XXVI (Notices and Submissions).

53. Future Response Costs Paid by Settling Defendants.

Settling Defendants shall reimburse the EPA Hazardous Substance Superfund for all Future Response Costs not inconsistent with the National Contingency Plan. The United States will send Settling Defendants a bill requiring payment that includes the EPA Region 9 Cost Summary Report and EPA's Cost Documentation Management System (CDMS) documentation, which sets forth direct and indirect costs incurred by EPA and its contractors on a periodic basis ("Bill"). Such documentation shall consist of monthly progress reports submitted to EPA by its contractors, provided that Settling Defendants shall have entered into an Agreement Regarding Confidentiality of Business Information substantially in the form attached hereto as Exhibit 4 which protects certain information which may be entitled to confidential treatment under 40 CFR Part 2. Settling Defendants receipt of the Cost Summary Report, CDMS documentation and monthly progress reports shall constitute receipt of a complete and final Bill to which Settling Defendants are entitled pursuant to this Consent Decree. Settling Defendants shall make all payments within sixty (60) calendar days of Settling Defendants' receipt of each Bill requiring payment, except as otherwise provided in Paragraph 54. Settling Defendants shall make all payments required by this Paragraph in the form of a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund" and referencing the EPA Region and Site/Spill ID #09-1C, the DOJ case number 90-11-3-369/2, and the name and address of the party making payment. Settling Defendants shall send the check(s) to:

EPA Superfund
U.S. EPA Region IX
Attention: Superfund Accounting
P.O. Box 360863M
Pittsburgh, Pennsylvania 15251

and shall send copies of the check(s) to Plaintiff as specified in Section XXVI (Notices and Submissions).

Settling Defendants may contest payment of any Future Response 54. Costs under this Paragraph: (a) if they determine that Plaintiff has made an accounting error or, (b) if they allege that a cost item that is included represents costs that were not actually incurred or that are inconsistent with the NCP. Such objection shall be made in writing within sixty (60) calendar days of receipt of the Bill and must be sent to the United States pursuant to Section XXVI (Notices and Submissions). Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Settling Defendants shall within the sixty (60) calendar day period pay all uncontested Future Response Costs to the United States in the manner described in Paragraph 53. Settling Defendants shall send to the United States, as provided in Section XXVI (Notices and Submissions), a copy of the transmittal letter and check or wire transfer confirmation paying the uncontested Future Response Costs, and a copy of documentation of payment of contested Future Response Costs into a sub-account of the Soils Remediation Trust Fund including the instructions for disbursement as approved as to form by EPA. Simultaneously with payment into the sub-account, Settling Defendants shall initiate the Dispute Resolution procedures in Section XIX (Dispute

Resolution) with respect to contested Future Response Costs. If the United States prevails in the dispute, within ten (10) days of the resolution of the dispute, Settling Defendants shall pay the sums due (with accrued Interest) to the United States in the manner described in Paragraph 53. If Settling Defendants prevail concerning any aspect of the contested costs, Settling Defendants shall pay to the United States that portion of the costs (plus associated accrued interest) for which they did not prevail; Settling Defendants shall be disbursed any balance of the sub-account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XIX (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Settling Defendants' obligation to reimburse the United States for its Future Response Costs.

55. Interest.

In the event that the payments required by Paragraph 52 (Payment of Past Response Costs by Settling Defendants) are not made within the required period of time or the payments required by Paragraph 53 (Future Response Costs Paid by Settling Defendants) are not made within sixty (60) calendar days of Settling Defendants' receipt of the Bill, including the documentation specified in Paragraph 53, Settling Defendants shall pay Interest on the unpaid balance. The Interest to be paid on Past Response Costs under this Paragraph shall begin to accrue thirty (30) calendar days after the United States on behalf of Settling Federal Agency has made its payment to TAA as provided in the Settlement Agreement and Paragraph 51.a. If Future Response Costs are not paid within said 60-day period, the Interest on Future Response Costs shall begin to accrue on the

date of receipt of the Bill. The Interest shall accrue through the date of Settling

Defendant's payment. Payments of Interest made under this Paragraph shall be in
addition to such other remedies or sanctions available to Plaintiff by virtue of Settling

Defendants' failure to make timely payments under this Section. Settling Defendants
shall make all payments required by this Paragraph in the manner described in Paragraph

53. Interest shall not accrue to the extent that Settling Defendants prevail in Dispute

Resolution as provided in Paragraph 68.

XVII. INDEMNIFICATION AND INSURANCE

into this agreement or by virtue of any designation of Settling Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Defendants shall indemnify, save and hold harmless the United States (with the exception of the Settling Federal Agency) and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Settling Defendants as EPA's authorized representatives under Section 104(e) of CERCLA.

Further, the Settling Defendants agree to pay the United States (except Settling Federal Agency) all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United

States based on negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of Settling Defendants in carrying out activities pursuant to this Consent Decree. Neither Settling Defendants nor any such contractor shall be considered an agent of the United States.

- b. The United States shall give Settling Defendants notice of any claim for which the United States plans to seek indemnification pursuant to, Subparagraph 56.a above, shall consult with Settling Defendants in defense of the claim, and shall consult with Settling Defendants prior to settling such claim.
- c. Nothing in this indemnification shall be construed as a waiver by a

 Settling Defendant of any right it may have to include costs incurred in implementation of
 this Consent Decree or any other work at or in conjunction with the Site in its allowable
 costs for purposes of pricing under contracts with the United States. Nothing in this
 Consent Decree shall be construed to create or recognize any such right.
- 57. Settling Defendants waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Settling Defendants shall indemnify and hold harmless the United

States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

No later than fifteen (15) days before commencing any on-Site 58. Work, Settling Defendants shall secure, and shall maintain until the first anniversary of EPA's Certification of Completion of the Remedial Action for the SGZ Remedy pursuant to Paragraph 47.b of Section XIV (Certification of Completion of Remedial Action) comprehensive general liability insurance with limits of one million dollars (\$1,000,000), combined single limit, and automobile liability insurance with limits of one million dollars (\$1,000,000), combined single limit, relating to the Work and naming the United States as an additional insured. In addition, for the duration of this Consent Decree, Settling Defendants shall satisfy, or shall require that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Settling Defendants in furtherance of this Consent Decree. Prior to commencement of the on-Site Work under this Consent Decree, Settling Defendants shall provide to EPA certificates of such insurance. Settling Defendants shall resubmit such certificates each year on the anniversary of the Effective Date of this Consent Decree. If Settling Defendants demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or

subcontractor. Settling Defendants need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XVIII. FORCE MAJEURE

- Settling Defendants and Settling Federal Agency shall perform all 59. the requirements of this Consent Decree according to the time limits forth in this Consent Decree, the SOW or any Deliverable or other submission delivered pursuant to this Consent Decree, unless their performance is prevented or delayed by events which constitute a "force majeure." "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Settling Federal Agency or Settling Defendants, or of any entity controlled by Settling Defendants or of Settling Defendants' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Settling Defendants' best efforts to fulfill the obligation. The requirement that Settling Defendants exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or a failure to attain the Performance Standards, other than the failure of the United States on behalf of Settling Federal Agency to make the payment to TAA as provided in the Settlement Agreement and Paragraph 51.a.
- 60. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure

event, Settling Defendants shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Director of the Superfund Division, EPA Region IX, within 72 hours of the time when Settling Defendants first knew that the event will cause a delay. Within ten (10) days thereafter, Settling Defendants shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Settling Defendants' rationale for attributing such delay to a force majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of Settling Defendants, such event may cause or contribute to an endangerment to public health, welfare or the environment. Settling Defendants shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Settling Defendants from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Settling Defendants shall be deemed to know of any circumstance of which Settling Defendants, any entity controlled by Settling Defendants, or Settling Defendants' contractors knew or should have known.

61. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent

Decree that are affected by the force majeure event will be extended by EPA for such

time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Settling Defendants in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Settling Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

62. If Settling Defendants elect to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution), they shall do so no later than fifteen (15) days after receipt of EPA's notice. In any such proceeding, Settling Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Settling Defendants complied with the requirements of Paragraphs 60 and 61 above. If Settling Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Settling Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

XIX. DISPUTE RESOLUTION

63. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to

resolve disputes arising under or with respect to this Consent Decree and the SOW.

However, the procedures set forth in this Section shall not apply to actions by United States to enforce obligations of Settling Defendants that have not been disputed in accordance with this Section.

64. <u>Informal Dispute Negotiations</u>.

Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed twenty-one (21) days from the time the dispute arises, unless it is modified by written agreement of the parties to the dispute. The dispute shall be considered to have arisen when one party sends the other parties a written Notice of Dispute pursuant to Section XXVI (Notice and Submissions) of this Consent Decree.

65. <u>Invoking Formal Dispute Resolution</u>.

a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph 64, then the position advanced by EPA shall be considered binding unless, within ten (10) days after the conclusion of the informal negotiation period, Settling Defendants invoke the formal dispute resolution procedures of this Section by serving on Plaintiff, pursuant to Section XXVI (Notices and Submissions), a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by Settling Defendants. The Statement of Position shall specify Settling Defendants' position as to whether formal dispute resolution should

proceed under Paragraph 66 or Paragraph 67 of this Section.

- b. Within sixty (60) calendar days after receipt of Settling Defendants'
 Statement of Position, EPA will serve on Settling Defendants its Statement of Position,
 including, but not limited to, any factual data, analysis, or opinion supporting that
 position and all supporting documentation relied upon by EPA. EPA's Statement of
 Position shall include a statement as to whether formal dispute resolution should proceed
 under Paragraph 66 or 67. Within ten (10) days after receipt of EPA's Statement of
 Position, Settling Defendants may submit a Reply.
- c. If there is disagreement between EPA and Settling Defendants as to whether dispute resolution should proceed under Paragraph 66 or 67, the parties to the dispute shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if Settling Defendants ultimately appeal to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 66 and 67.

66. Formal Dispute with Record Review.

Formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of

response actions taken pursuant to this Consent Decree. Nothing in this Consent Decree shall be construed to allow any dispute by Settling Defendants regarding the validity of the ROD's provisions.

- a. An administrative record of the dispute shall be maintained by EPA and shall contain all statements of position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the parties to the dispute.
- b. The Director of the Superfund Division, EPA Region IX, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 66.a. This decision shall be binding upon Settling Defendants, subject only to the right to seek judicial review pursuant to Paragraph 66.c. and d.
- c. Any administrative decision made by EPA pursuant to Paragraph 66.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by Settling Defendants with the Court and served on all Parties within ten (10) days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Settling Defendants' motion.
- d. In proceedings on any dispute governed by this Paragraph, Settling

 Defendants shall have the burden of demonstrating that the decision of the Superfund

 Division Director is arbitrary and capricious or otherwise not in accordance with law.

Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 66.a., including any supplementation of the record allowed by the court under applicable principles of administrative law.

67. Other Formal Disputes.

Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law, shall be governed by this Paragraph.

- a. Following receipt of Settling Defendants' Statement of Position submitted pursuant to Paragraph 65, the Director of the Superfund Division, EPA Region IX, will issue a final decision resolving the dispute. The Superfund Division Director's decision shall be binding on Settling Defendants unless, within ten (10) days of receipt of the decision, Settling Defendants file with the Court and serve on Plaintiff a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree.

 Plaintiff may file a response to Settling Defendants' motion.
- b. Notwithstanding Paragraph M of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.
- 68. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of Settling

Defendants under this Consent Decree not directly in dispute unless EPA or the Court agrees otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 73. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that Settling Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties). In any dispute in which Settling Defendants prevail any penalties which would otherwise accrue for violations of any affected Deliverable shall be void.

XX. STIPULATED PENALTIES

69. Settling Defendants shall be liable to Plaintiff for stipulated penalties in the amounts set forth in Paragraphs 70 and 71 below for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XVIII (Force Majeure) or Section XIX (Dispute Resolution). "Compliance" by Settling Defendants shall include completion of the activities under this Consent Decree or any Deliverable or any work plan or other plan approved by EPA under this Consent Decree identified in Appendix K in accordance with all applicable requirements of law, this Consent Decree, and the SOW within the specified time schedules established by and approved under this Consent Decree. Notwithstanding any other provision of this Consent Decree, stipulated penalties shall not be assessed if Settling Defendants (i) fail to provide timely notice under Paragraph 95, or, (ii) despite best efforts, fail to obtain access as required under Paragraph 27.

70. Class I Stipulated Penalties.

a. Penalty Amounts.

The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Subparagraph b of this Paragraph:

| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-------------------------|
| \$ 750 | First through 14th day |
| \$ 1,250 | 15th through 30th day |
| \$ 2,500 | 31st day and thereafter |

b. <u>Class I Violations</u>.

Unless otherwise provided in this Consent Decree, each failure to comply in a timely and adequate manner with the terms of this Consent Decree, including the SOW, and any documents incorporated into this Consent Decree pursuant to its terms that are not specifically identified below as Class II violations under Paragraph 71.b (Class II Violations), including, but not limited to, failure to submit timely and adequate Periodic Progress Reports, and failure to make any payment required under Section XVI (Payments by United States and Settling Defendants), shall be a Class I violation subject to the stipulated penalties set forth in subparagraph 70.a. above.

71. Class II Stipulated Penalties.

a. Penalty Amounts.

The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents identified in Subparagraph b of this Paragraph 71:

| Per Day | Period of Noncompliance |
|----------|-------------------------|
| \$ 1,000 | First through 14th Day |
| \$ 2,500 | 15th through 30th Day |
| \$ 5,000 | 31st day and thereafter |

b. <u>Class II Violations</u>.

Each failure to submit in a timely and adequate manner the Deliverables set forth below shall be a Class II violation subject to the stipulated penalties set forth in subparagraph 71.a. above:

- (i) Remedial Design Work Plan;
- (ii) Plug-In Subsites Remedial Design Report;
- (iii) Remedy Required Subsites Remedial Design Report;
- (iv) TI Zone SGZ Remedial Design Report;
- (v) PCB Soils Remedial Action Work Plan;
- (vi) SGZ Remedy Outside TI Zone Remedial Design Report; and
- (vii) Final Technical Memoranda submitted pursuant to the SOW.
- 72. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 86 (Work Takeover) of Section XXI (Covenants by United States), Settling Defendants shall be liable for a stipulated penalty in the amount of \$750,000.
- 73. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However,

stipulated penalties shall not accrue: (1) with respect to a deficient Second Resubmittal under Section XI (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such Second Resubmittal until the date that EPA notifies Settling Defendants of a deficiency in a Second Resubmittal which has been resubmitted pursuant to Paragraph 36; (2) with respect to a decision by the Director of the Superfund Division, EPA Region IX, under Paragraph 66.b. or 67.a. of Section XIX (Dispute Resolution), during the period, if any, beginning on the 14th day after the date that Settling Defendants' reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XIX (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

- 74. Following EPA's determination that Settling Defendants have failed to comply with a requirement of this Consent Decree, EPA may give Settling Defendants written notification of the same and describe the noncompliance. EPA may send Settling Defendants a written demand for the payment of the penalties. With respect to any Deliverable identified in Appendix K or any other plan, report, or other item submitted pursuant to the SOW, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified the Settling Defendants of a violation.
 - 75. All penalties accruing under this Section shall be due and payable

to the United States within thirty (30) calendar days of Settling Defendants' receipt from EPA of a demand for payment of the penalties, unless Settling Defendants invoke the Dispute Resolution procedures under Section XIX (Dispute Resolution). All payments to the United States under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to:

U.S. EPA Superfund EPA Region IX Attention: Superfund Accounting P.O. Box 360863M Pittsburgh PA 15251

and shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID #09-1C, the DOJ Case Number 90-11-3-369/2 and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to Plaintiff as provided in Section XXVI (Notices and Submissions).

- 76. The payment of penalties shall not alter in any way Settling

 Defendants' obligation to complete the performance of the Work required under this

 Consent Decree.
- 77. Penalties shall continue to accrue as provided in Paragraph 73 during any dispute resolution period, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within fifteen (15) days of the agreement or the receipt of EPA's decision or order;
 - b. If the dispute is appealed to this Court and the United States

prevails in whole or in part, Settling Defendants shall pay all accrued penalties determined by the Court to be owed to EPA within sixty (60) days of receipt of the Court's decision or order, except as provided in subparagraph c. below;

- c. If the District Court's decision is appealed by any Party, Settling Defendants shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing sub-account of the Soils Remediation Trust within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Under the terms of the Soils Trust Agreement, Settling Defendants shall require the Soils Trustee to pay, within 15 days of receipt of the final appellate court decision, the balance of the sub-account to EPA or to Settling Defendants to the extent that they prevail or the Parties otherwise agree.
- 78. a. If Settling Defendants fail to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as Interest. Settling Defendants shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 74.
- b. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of Plaintiff to seek any other remedies or sanctions available by virtue of Settling Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA. Provided, however, that Plaintiff shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of

the Consent Decree.

- 79. In determining the deadline by which a submission to EPA is due for purposes of this Section XX (Stipulated Penalties), the provisions of Paragraph 12.c. shall be taken into account.
- 80. Notwithstanding any other provision of this Section, Plaintiff may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XXI. COVENANTS BY UNITED STATES

- 81. Covenant Not to Sue or Take Administrative Action.
- a. Covenant to Settling Defendants.

In consideration of the actions that will be performed and the payments that will be made by Settling Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraphs 82 (Plaintiff's Pre-certification Reservations), 83 (Plaintiff's Post-Certification Reservations) and 85 (General Reservations of Rights) of this Section, the United States covenants not to sue or to take administrative action against Settling Defendants pursuant to Sections 106 and 107(a) of CERCLA and Section 7003 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6973 ("RCRA"), relating to the Site, including, but not limited to, the Work, Past Response Costs, Interim Response Costs, Future Response Costs and Past Response Actions. The above covenant not to sue (and reservations thereto) shall also apply to Settling Defendants' officers, directors, employees, successors and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or

assign is based on its status and in its capacity as an officer, director employee, successor, or assign of Settling Defendants, and not to the extent that the alleged liability arose independently of the alleged liability of the Settling Defendants. Except with respect to future liability, these covenants shall take effect upon the receipt by EPA of the payments required by Paragraph 52.a. of Section XVI (Payments by United States and Settling Defendants). With respect to future liability, these covenants shall take effect with respect to each Individual Remedy upon Certification of Completion of Remedial Action of such Individual Remedy by EPA pursuant to Paragraph 47.b of Section XIV (Certification of Completion). These covenants are conditioned upon the satisfactory performance by Settling Defendants of their obligations under this Consent Decree.

These covenants extend only to Settling Defendants and do not extend to any other person.

b. Covenant to Settling Federal Agency.

In consideration of the payments that will be made by Settling Federal Agency under the terms of the Consent Decree, and except as specifically provided in Paragraphs 82 (Plaintiff's Pre-certification Reservations), 83 (Plaintiff's Post-certification Reservations) and 85 (General Reservations of Rights) of this Section, EPA covenants not to take administrative action against Settling Federal Agency pursuant to Section 106 and 107(a) of CERCLA and Section 7003 of RCRA, 42 U.S.C. § 6973, relating to the Site including, but not limited to, the Work, Past Response Costs, Interim Response Costs and Future Response Costs, and Past Response Actions. Except with respect to future liability, EPA's covenant shall take effect upon the payment to TAA

required by Paragraph 51.a of Section XVI (Payments by United States and Settling Defendants). With respect to future liability, EPA's covenant with respect to each Individual Remedy shall take effect upon Certification of Completion of Remedial Action of such Individual Remedy by EPA pursuant to Paragraph 47.b of Section XIV (Certification of Completion). EPA's covenant is conditioned upon the satisfactory performance by Settling Federal Agency of its obligations under this Consent Decree. EPA's covenant extends only to the Settling Federal Agency and does not extend to any other person.

82. Plaintiff's Pre-certification reservations.

Notwithstanding any other provision of this Consent Decree, (a) the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order to compel Settling Defendants and (b) EPA reserves, and this Consent Decree is without prejudice to, the right to issue an administrative order seeking to compel Settling Federal Agency: (1) to perform further response actions relating to the Site; or (2) to reimburse the United States Hazardous Substance Superfund for additional costs of response if, prior to a Certification of Completion of the Remedial Action:

- (i) conditions at the Site, previously unknown to EPA, are discovered, or
- (ii) information, previously unknown to EPA, is received, in whole or in part; and these previously unknown conditions or information together with any other relevant information indicates that the Remedial Action is not protective of human health or the environment.

83. Plaintiff's Post-certification reservations.

Notwithstanding any other provision of this Consent Decree, (a) the
United States reserves, and this Consent Decree is without prejudice to, the right to
institute proceedings in this action or in a new action, or to issue an administrative order
to compel Settling Defendants, and (b) EPA reserves, and this Consent Decree is without
prejudice to, the right to issue an administrative order to compel Settling Federal Agency
(1) to perform further response actions relating to the Site; or (2) to reimburse the United
States Hazardous Substance Superfund for additional costs of response if, subsequent to a
Certification of Completion of the Remedial Action:

- (i) conditions at the Site, previously unknown to EPA, are discovered, or
- (ii) information, previously unknown to EPA, is received, in whole or in part; and these previously unknown conditions or this information together with other relevant information indicate that the Remedial Action is not protective of human health or the environment.
- Reservations), the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the ROD was signed and set forth in the ROD and the administrative record supporting the ROD, and shall also include such further information and conditions as becomes known to EPA due to documents provided by Settling Defendants between the issuance of the ROD and the lodging of this Consent Decree as listed on Appendix N. For purposes of Paragraph 83 (Plaintiff's Post-certification Reservations), the information and the conditions known to

EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the Remedial Action and set forth in the ROD, the administrative record supporting the ROD, the post-ROD administrative record, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Remedial Action.

85. General Reservations of Rights.

The covenants set forth above do not pertain to any matters other than those expressly specified in Paragraph 81. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Defendants, and EPA and the federal natural resource trustees reserve, and this Consent Decree is without prejudice to, all rights against Settling Federal Agency, with respect to all other matters, including but not limited to, the following:

- (1) claims based on a failure by Settling Defendants or Settling Federal

 Agency to meet a requirement of this Consent Decree;
- (2) liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site;
- (3) liability for future disposal of Waste Material at the Site, other than as provided in the ROD, the Work, or otherwise ordered by EPA;
- (4) liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- (5) criminal liability;
- (6) liability for violations of federal or state law which occur during or after

implementation of the Remedial Action; and

(7) liability, prior to Certification of Completion of Remedial Action for the SVE Remedy, the SGZ Remedy, the PCB Remedy and the TAA Landfill Remedy, for further response actions that EPA determines are necessary to achieve Performance Standards, but that cannot be required pursuant to Paragraph 14 (Modification of the SOW or Related Work Plans).

86. Work Takeover.

In the event EPA determines that Settling Defendants (i) have ceased implementation of any portion of the Work, (ii) prior to completion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or (iii) are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary. Settling Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by Plaintiff in performing the Work pursuant to this Paragraph and not inconsistent with the NCP shall be considered Future Response Costs that Settling Defendants shall pay pursuant to Section XVI (Reimbursement of Response Costs).

Except as necessary to address an imminent and substantial endangerment to human health or the environment, if EPA decides to take over all or a portion of the Work, EPA will provide all Settling Defendants with written notice of such decision not less than ten (10) days before EPA takes over such work stating the reason for the

takeover and what portion(s) of the Work is (are) being taken over. In the event of takeover to address an imminent and substantial endangerment to human health or the environment, EPA shall give written notice to all Settling Parties not less than twenty (20) days after such takeover stating the reason for the takeover and what portion(s) of the Work is (are) being taken over.

87. Notwithstanding any other provision of this Consent Decree, Plaintiff retains all authority and reserves all rights to take any and all response actions authorized by law.

XXII. COVENANTS BY SETTLING DEFENDANTS AND SETTLING FEDERAL AGENCY

- 88. Covenants Not to Sue by Settling Defendants.
- a. Subject to the reservations in Paragraph 90, Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States relating to the Site, including but not limited to, the Work, Past Response Costs, Interim Response Costs, and Future Response Costs, and Past Response Actions including, but not limited to:
 - (i) any direct or indirect claim for reimbursement from the Hazardous

 Substance Superfund (established pursuant to the Internal Revenue Code, 26

 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any
 other provision of law;
 - (ii) any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113, 42

U.S.C. §§ 9607 or 9613, related to the Site; and

- (iii) any claims arising out of response activities at the Site, including claims based on EPA's selection of response actions, oversight of response activities or approval of plans for such activities.
- b. Settling Defendants' covenants not to sue shall not be construed as a waiver by a Settling Defendant of any right it may have to include costs incurred in implementation of this Consent Decree or any other work at or in conjunction with the Site in its allowable costs for purposes of pricing under contracts with the United States.

 Nothing in this Consent Decree shall be construed to create or recognize any such right.
 - 89. Covenant by Settling Federal Agency.
- a. Settling Federal Agency hereby agrees not to assert any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law relating to the Site, including but not limited to the Work, Past Response Costs, Interim Response Costs, and Future Response Costs, and Past Response Actions. This covenant does not preclude demand for reimbursement from the Superfund of costs incurred by Settling Federal Agency in the performance of its duties (other than pursuant to this Consent Decree) as lead or support agency under the National Contingency Plan (40 CFR Part 300).
- b. The United States reserves, and this Consent Decree is without prejudice to:
 - (1) as against General Dynamics, any and all rights, defenses, claims,

counterclaims, cross-claims and/or causes of action in the United States

Court of Federal Claims or any successor Court or before the Armed

Services Board of Contract Appeals or any successor Board, based or
dependent upon any rights or obligations created in any contract and/or
contract modification entered into by Consolidated Aircraft Corporation or
Consolidated Vultee Aircraft Corporation, on the one hand, and the
United States, by or through the War Department (and/or any department,
agency or organization thereunder or therein), on the other hand, for the
establishment, operation and/or lease of the Tucson Modification Center
(a/k/a Modification Center No. 2) and/or the modification of aircraft at the
center during the period of January 1, 1941 through January 1, 1947.

- 90. Settling Defendants reserve, and this Consent Decree is without prejudice to:
 - (a) except as provided in any separate agreement between the United States and any one or more of the Settling Defendants, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, as amended, or any other statutory waiver of sovereign immunity making the United States amenable to suit in tort for money damages for injury or loss of property or personal injury or death. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's

Defendants' plans or activities; nor, if any claim or other cause of action is brought against a Settling Defendant arising out of the performance of any response actions by any Settling Defendant, or its agents, representatives, contractors, or any person acting on its behalf or under its control, shall such Settling Defendant bring any claim or other cause of action against the United States that is based on any act or omission of any federal employee occurring prior to the Effective Date. The foregoing reservation applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA;

- (b) contribution claims against Settling Federal Agency in the event any claim is asserted by the United States against Settling Defendants under the authority of or under Paragraphs 82, 83, or 85(1) (4) and (7) of Section XXI (Covenants by United States), but only to the same extent and for the same matters, transactions or occurrences as are raised in the claim of the United States against Settling Defendants;
- (c) contribution claims against Settling Federal Agency in the event that EPA requires further response actions pursuant to Paragraph 20 and that Settling Defendants have incurred response costs in the performance of further response actions under Paragraph 20, but any claim under the reservation in this Paragraph 90(c) shall be limited to a claim for the reimbursement of all or some of those response costs;

- (d) any and all rights, defenses, claims, counterclaims, cross-claims, and/or causes of action by General Dynamics in the United States Court of Federal Claims or any successor Court or before the Armed Services Board of Contract Appeals or any successor Board based or dependent upon any rights or obligations created in any contract and/or contract modification entered into by Consolidated Aircraft Corporation or Consolidated Vultee Aircraft Corporation, on the one hand, and the United States, by or through the War Department (and/or any department, agency or organization thereunder or therein), on the other hand, for the establishment, operation and/or lease of the Tucson Modification Center (a/k/a Modification Center No. 2) and/or the modification of aircraft at that center during the period of January 1, 1941 through January 1, 1947.
- 91. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXIII. EFFECT OF SETTLEMENT: CONTRIBUTION PROTECTION

92. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree.

The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site

against any person not a Party hereto.

- The Parties agree, and by entering this Consent Decree this Court 93. finds, that Settling Defendants and Settling Federal Agency, are entitled, as of the Effective Date of this Consent Decree, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), and any other applicable statute, regulation or common law, for matters addressed in this Consent Decree. The "matters addressed" in this Consent Decree are all response actions taken or to be taken and all response costs incurred or to be incurred by the United States or any other person with respect to the Site, including but not limited to further response actions performed by Settling Defendants pursuant to Paragraph 20. The "matters addressed" in this Consent Decree do not include those response actions or response costs as to which the United States has reserved its rights under this Consent Decree (except for claims for failure to comply with this Consent Decree), in the event that the United States asserts rights against Settling Defendants coming within the scope of such reservations. For the purposes of this Paragraph 93, response actions taken and response costs incurred by Settling Defendants pursuant to Paragraph 20 shall be deemed not to have been taken or incurred pursuant to an assertion by the United States of a reserved right. Nothing in this Paragraph 93 shall impair any reservation of rights under this Consent Decree.
- 94. Settling Defendants agree that with respect to any suit or claim for contribution brought by them for matters related to this Consent Decree they will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

- 95. Settling Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree they will notify in writing the United States within sixty (60) days of service of the complaint on them. In addition, Settling Defendants shall notify the United States within thirty (30) days of service or receipt of any Motion for Summary Judgment and within thirty (30) days of receipt of any order from a court setting a case for trial.
- 96. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XXI (Covenants by United States).

XXIV. ACCESS TO INFORMATION

97. Settling Defendants shall provide to EPA, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Settling Defendants shall also

make available to EPA for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work. Upon EPA's request, Settling Defendants shall submit such documents and other information electronically.

- 98. a. Settling Defendants may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiff under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if, pursuant to Section 104(e)(7) of CERCLA, EPA has notified Settling Defendants that the documents or information are not confidential under the standards of 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Settling Defendants.
- b. Settling Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Settling Defendants assert such a privilege in lieu of providing documents, they shall provide Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the

document, record, or information: and (6) the privilege asserted by Settling Defendants.

However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

court of competent jurisdiction prior to the Effective Date of this Consent Decree, no claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site. In the event that a protective order is entered after the Effective Date of this Consent Decree, Settling Defendants shall use best efforts to assure that any such protective order does not affect Settling Defendants' obligations under this Consent Decree with respect to any data developed by Settling Defendants during the course of the Work.

XXV. <u>RETENTION OF RECORDS</u>

100. Until five (5) years after Settling Défendants' receipt of EPA's notification pursuant to Paragraph 48.b. of Section XIV (Certification of Completion of the Work), (i) Settling Defendants shall create a single set of records in order to preserve and retain all records and documents that relate in any manner to the performance of the Work and (ii) subject to any protective order that may have been issued by a court of competent jurisdiction prior to the Effective Date of this Consent Decree, each Settling Defendant shall preserve and retain all records and documents now in its possession or

control or which come into its possession or control that relate in any manner to liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. In the event that a protective order is entered after the Effective Date of this Consent Decree, Settling Defendants shall use best efforts to assure that any such protective order does not affect such Settling Defendant's obligations under this Consent Decree with respect to any records and documents developed by such Settling Defendant. Until five (5) years after Settling Defendants' receipt of EPA's notification pursuant to Paragraph 48.b. of Section XIV (Certification of Completion of the Work). Settling Defendants shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the Work.

The requirement for preservation and retention of records and documents shall not apply to drafts (other than those referred to by name in this Decree), including any handwritten notes or comments of a Settling Defendant, or phone message slips, except any such draft or phone message slip that contains data relevant to the Remedial Action that is not otherwise being preserved under this Decree.

Defendants shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States. Settling Defendants shall deliver any such records or documents to EPA. Settling Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Settling Defendants assert

such a privilege, they shall provide Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Settling Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

- best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated. discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.
- 103. The United States acknowledges that Settling Federal Agency (1) is subject to all applicable federal record retention laws, regulations, and policies; and (2) has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C.§§ 9604(c) and 9622(e), and Section 3007 of RCRA, 42 U.S.C.§ 6927.

XXVI. NOTICES AND SUBMISSIONS

is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States and Settling Defendants, respectively.

As to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice P.O. Box 7611 Ben Franklin Station Washington, D.C. 20044 Re: DJ #90-11-3-36912

Chief, Environmental Defense Section
Environmental and Natural Resources Division
United States Department of Justice
P.O. Box 23986
Ben Franklin Station
Washington, D.C. 20026-3986
Re: DJ #90-11-3-1427

Keith Takata
Director, Superfund Division
United States Environmental Protection Agency
Region IX
75 Hawthorne Street, SFD-7
San Francisco, California 94105

Tomas Torres
EPA Project Coordinator
United States Environmental Protection Agency
Region IX
75 Hawthorne Street, SFD-7
San Francisco, California 94105

Danita Yocom
U.S. EPA Region IX
75 Hawthorne Street, ORC-3-2
San Francisco, California 94105

Chief, Environmental Law and Litigation Division Air Force Legal Services Agency U.S. Department of the Air Force 1501 Wilson Blvd., Suite 629 Arlington, Virginia 22209-2403

As to Settling Defendants

Settling Defendants' Project Coordinator: Fred E. Brinker Director of Environmental Services Tucson Airport Authority 7005 South Plumer Avenue Tucson, Arizona 85706

Chief Executive Officer Tucson Airport Authority 7005 South Plumer Avenue Tucson, Arizona 85706

XXVII. EFFECTIVE DATE

105. The Effective Date of this Consent Decree shall be the latter date upon which this Consent Decree or the Second Modification to the TARP Consent Decree is entered by the Court.

XXVIII. RETENTION OF JURISDICTION

106. This Court retains jurisdiction over both the subject matter of this

Consent Decree and the Parties for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XIX (Dispute Resolution) hereof.

XXIX. APPENDICES AND EXHIBITS

107. Appendices.

- a. The following appendices are attached to and incorporated into this Consent
- Decree:
 - "Appendix A" is the ROD.
 - "Appendix B" is the SOW.
 - "Appendix C"is a figure generally depicting the Airport Property and the Site.
 - "Appendix D" is a map of the TIAA Superfund Site.
 - "Appendix E" is a map of the lateral contours of the SGZ, including the TI Zone.
 - "Appendix F" is a form of notice to be recorded with respect to the Restricted Airport

 Property.
 - "Appendix G" is a form of Termination of Notice.
 - "Appendix H" is a form of reservation of rights.
 - "Appendix I" is a form of sublease insert.
 - "Appendix J" is a draft access easement.

- "Appendix K" is a list of the Deliverables [See Table 6.1 of SOW].
- "Appendix L-1" is a map showing the Restricted Airport Property and the areas that are subject to Paragraph 20.
- "Appendix L-2" is a set of legal descriptions for Parcels Athrough F of the Restricted Airport Property.
- "Appendix M" is a list of contaminants that are subject to Paragraph 20.
- "Appendix N" is a list of documents generated after the ROD but before the lodging of this Consent Decree.

b. Exhibits.

The following Exhibits are attached for reference only and are not incorporated into this Consent Decree:

"Exhibit 1" is a Master Remediation Trust Agreement between TAA and Bank
One of Arizona, NA.

"Exhibit 2" is a Soils Remediation Trust Agreement among TAA, the City,
General Dynamics, McDonnell Douglas and Bank One of Arizona, NA.

"Exhibit 3" is a Settlement Agreement among the United States, on behalf of
Settling Federal Agency, TAA and the City.

"Exhibit 4" is an Agreement Regarding Confidential Business Information.

XXX. COMMUNITY RELATIONS

108. Settling Defendants shall cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Settling Defendants

shall participate in the preparation of such information for dissermination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

XXXI. MODIFICATION

- 109. Schedules specified in this Consent Decree for completion of the Work may be modified by agreement of EPA and Settling Defendants. All such modifications shall be made in writing.
- 110. Except as provided in Paragraph 14 ("Modification of the SOW or Related Work Plans"), no material modifications shall be made to the SOW without written notification to and written approval of the United States, Settling Defendants, and the Court. Modifications to the SOW that do not materially alter that document may be made by written agreement between EPA and Settling Defendants.
- 111. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXXII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

112. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Settling Defendants consent to the entry of this Consent Decree without further notice. As part of a comprehensive settlement relating to

an area of the TIAA Superfund Site, which includes but is not limited to the Site as defined in this Consent Decree, the United States is lodging a Second Modification to the TARP Consent Decree concurrent with this Consent Decree.

Decree, or the Second Modification to the TARP Consent Decree that was lodged with the Court concurrent with this Consent Decree, both in the form presented, this Consent Decree is voidable at the sole discretion of any of the Parties. In any event, the terms of this Consent Decree, and the underlying agreements among the Parties may not be used as evidence in any litigation between the Parties.

XXXIII. SECTION HEADINGS.

114. The Section headings in this Consent Decree are included for convenience of reference only and shall be disregarded in the construction or interpretation of any provisions herein.

XXXIV. COUNTERPARTS

115. This Consent Decree may be executed in any number of counterpart originals, each of which shall be deemed to constitute an original agreement, and all of which shall constitute one agreement. The execution of one counterpart by any Party shall have the same force and effect as if that Party had signed all other counterparts.

XXXV. SIGNATORIES/SERVICE

116. Each undersigned representative of a Party to this Consent Decree certifies that he or she is fully authorized to enter into the terms and conditions of this

Consent Decree and to execute and legally bind such Party to this Consent Decree. By their representatives' signatures below, the Parties consent to entry of this Consent Decree.

- 117. Each Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree, unless the United States has notified Settling Defendants in writing that it no longer supports entry of the Consent Decree.
- page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendants hereby agree to accept service in

that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

119. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgement between the United States and the Settling Defendants. This Court finds that there is no just reason for delay and therefore enters this judgment under Rules 54 and 58 of the Federal Rules of Civil Procedure.

SO ORDERED THIS

United States District Judge

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of <u>United</u>

States v. Tucson Airport Authority et al., relating to the herein-described Site within the

Tucson International Airport Area Superfund Site.

FOR THE UNITED STATES OF AMERICA

| Date: | 5/ | 4 | 4 | 4 | |
|-------|----|---|---|---|--|
| | | | | | |

LOIS SCHIFFER

Assistant Attorney General

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of <u>United</u>

<u>States v. Tucson Airport Authority et al.</u>, relating to the herein-described Site of the Tucson

International Airport Area Superfund Site.

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of <u>United</u>

States v. Tucson Airport Authority et al., relating to the herein-described Site of the Tucson

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LODGED PUTY IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF ARIZONA

UNITED STATES OF AMERICA. No. CV 99-313-TUC-WDB Plaintiff. **ORDER** VS. TUCSON AIRPORT AUTHORITY, CITY OF TUCSON, HUGHES AIRCRAFT CO., and McDONNELL DOUGLAS CORP., Defendants.

Based on the Motion for Entry of Consent Decree and good cause appearing, the Court will enter the consent decree lodged by the parties on November 17, 1999.

Accordingly.

IT IS ORDERED that the consent decree is ENTERED and FILED with the Court. IT IS FURTHER ORDERED that the consent decree shall take effect fourteen (14) days from the date of this Order.

day of February, 2000.

illiam D. Browning Senior United States District Judge

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FAX



United States District Court

District of Arizona

Notice of Orders or Judgments Fed. R. Civ. P. 77(d) Fed.R.Crim.P.49

Date:

02/18/00

To:

Danita Yocom 75 Hawthorne St

San Francisco, CA 94105

Re: Case Number:

4:99-cv-00313

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** The District of Arizona adopted new Local Rules effective 9/15/99. To view or

** obtain a copy, access the court's website at www.azd.uscourts.gov and reference **

** General Order 99-15 under "General Orders". The 1/94 version of the Local *

** Rules are still available on the court's website under "Local Rules."



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

TO: Distribution List

March 22, 1999

RE: Tucson International Airport Area Superfund Site:
Remedial Design/Remedial Action Consent Decree
Appendices B.C.2. D. E. K. L-1. and M

Reference is given to EPA's March 19, 1999 letter which issued the final version of the above-referenced consent decree. Enclosed please find the following appendices to this consent decree:

- 1) Appendix B, Statement of Work;
- 2) Appendix C.2, Map of the Site;
- 3) Appendix D, Map of the TIAA Superfund Site;
- 4) Appendix E, Map of the Lateral Contours of the Shallow Groundwater Zone;
- 5) Appendix K, List of Deliverables;
- 6) Appendix L-1, Map of the Restricted Airport Property;
- 7) Appendix M, List of Chemicals subject to Paragraph.

Please call me at (415) 744-2370 with any questions regarding these appendices.

Sincerely,

Craig Cooper

Remedial Project Manager

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APPENDIX B

Statement of Work ("SOW")

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LIST OF ACRONYMS

ADEQ Arizona Department of Environmental Quality

AFP 44 Air Force Plant No. 44
AI Additional Investigation
AMSL Above mean sea level

ARARs Applicable or Relevant and Appropriate Requirements

bgs Below ground surface

CERCLA Comprehensive Environmental Response, Compensation, and

Liability Act

CRA Conestoga-Rovers & Associates
DBS&A Daniel B. Stephens & Associates
DNAPL Dense Non-Aqueous Phase Liquids
EPA Environmental Protection Agency

FS Feasibility Study
HASP Health and Safety Plan

HBGLs Health Based Guidance Levels
MCLs Maximum Contaminant Levels

ug/1 Micrograms per Liter
mg/kg Milligrams per Kilogram

MPSG Multi-Port Soil Gas

MPSG/GW Multi-Port Soil Gas/Groundwater NCDC National Climatic Data Center

NFA No Further Action
NGB National Guard Bureau

NIOSH National Institute for Occupational Safety and Health

OSHA Occupational Safety and Health Association

OVA Organic Vapor Analyzer
PCBs Polychlorinated Biphenyls
PID Photoionization Detector
QAPP Quality Assurance Project Plan
OA/OC Quality Assurance/Quality Control

RAO Remedial Action Objective

RCRA Resource Conservation and Recovery Act

RD/RA Remedial Design/Remedial Action

RI Remedial Investigation

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

SAP Sampling and Analysis Plan SGSLs Soil Gas Screening Level SGZ Shallow Groundwater Zone

SOW Statement of Work
SVE Soil Vapor Extraction
SWDA Safe Water Drinking Act

| TAA | Tucson Airport Authority |
|-------------|------------------------------------|
| TARP | Tucson Airport Remediation Project |
| TCE | Trichloroethene |
| TI | Technical Impracticability |
| TIA | Tucson International Airport |
| TSCA | Toxic Substances Control Act |
| UAO | Unilateral Administrative Order |
| USAF | United States Air Force |
| VOCs | Volatile Organic Compounds |

1.0 PURPOSE

This Statement of Work ("SOW"), which is incorporated into, and enforceable under, the Consent Decree in the matter of United States v. Tucson Airport Authority et al., sets forth the specifications, criteria and other requirements for implementing the selected remedies set forth in the ROD and the Work required by the Consent Decree.

1.1 **DEFINITIONS**

Tasks, data collection activities, and reporting conducted by the Settling Defendants in accordance with this SOW will be reported in Deliverables and Draft Technical Memoranda.

"Deliverables" are defined within the Consent Decree and "Technical Memoranda" is described below. The Settling Defendants will submit Deliverables to EPA within the time frame of the approved schedule (Table 6.1). All definitions included in the Consent Decree are incorporated herein by reference.

"Technical Memoranda" are those documents that present components of the 30% Remedial Design. Settling Defendants will distribute the Draft Technical Memorandum 10 days prior to the Project Meeting, and will incorporate the results of the Project Meeting into the Final Technical Memorandum 20 days after the Project Meeting is completed. The Final Technical Memoranda are Deliverables which have the same overall content requirements as the Draft Technical Memoranda. The Draft Technical Memoranda are not Deliverables.

2.0 OVERVIEW OF THE WORK: REMEDIES, SUBSITES AND PERFORMANCE STANDARDS

Settling Defendants shall design and implement the Work to meet the Performance Standards set forth herein and in the ROD. The Performance Standards include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations, including all Applicable or Relevant and Appropriate Requirements ("ARARs") set forth in section 11.0 of the ROD.

This SOW sets forth the work for: (i) a remedy for VOC contaminated soils

("SVE Remedy"); (ii) a remedy for contamination in the Shallow Groundwater Zone ("SGZ Remedy"); (iii) a remedy for PCB and metals contaminated soils ("PCB Soils Remedy"); and (iv) a remedy for closure of the TAA solid waste landfill ("TAA Landfill Remedy"). Each such remedy is summarized below, together with its respective Performance Standards. The SVE Remedy and the SGZ Remedy each address various subsites with different Performance Standards. This section identifies such subsites.

The ROD and this SOW provide for certain technological options for the SVE Remedy and the SGZ Remedy. Settling Defendants shall evaluate these technological options using the criteria set forth in this SOW during performance of their Remedial Design obligations as set forth in the Consent Decree and this SOW.

2.1 **SVE REMEDY**

The Settling Defendants shall perform the SVE Remedy as follows:

Installation and operation of one or more SVE systems at the SVE Remedy Required Subsites and within the TI Zone ("Remedy Required Sites") which were determined in the ROD to have contaminant concentrations that have caused and could continue to cause groundwater to exceed the Performance Standards. The Remedy Required Subsites which are located outside of the TI Zone are listed in Table 2.1 and depicted on Figure 2.1 attached ("Remedy Required Subsites"). The TI Zone is depicted in Appendix E of the Consent Decree.

Modelling of the SVE Plug-In Subsites listed in Table 2.2 and depicted on Figure 2.1 attached to this SOW to determine whether or not the narrative Performance Standard could be exceeded.

Installation and operation of SVE systems at the Plug-In Subsites meeting the criteria set forth in section 3.0 below.

On-site treatment of soil vapors using one or more of the following technologies: (i) catalytic oxidation, (ii) thermal oxidation, (iii) vaporphase carbon, (iv) vapor-phase resin adsorption, and (v) no treatment (Plug-In Subsites only). During Remedial Design, Settling Defendants will analyze and evaluate such technology and submit such analysis and evaluation to EPA for review and approval. Such analysis, evaluation and approval will be based upon the criteria set forth in section 3.0 below.

During Remedial Design an evaluation of the suitability of each SVE subsite for the following SVE enhancement technologies: (i) capping or paving, (ii) bioventing, (iii) pneumatic fracturing of the subsurface, and (iv) multiphase extraction. Enhancement technology for SVE Subsites will be evaluated using the criteria set forth in section 3.0. If that evaluation results in a determination by EPA that the technology should be, Settling Defendants shall employ such enhancement technology. Only options ii) and iv) will be evaluated for the TI Zone.

2.1.1 Performance Standard for Plug-In Subsites

The narrative Performance Standard for the SVE Remedy at the Plug-In Subsites is to reduce VOC concentrations in soil such that further contaminant migration will not cause groundwater in the first saturated unit (either the SGZ or the Regional Aquifer) underlying that Plug-In Subsite to exceed the Performance Standards as set forth in Table 2.3. Settling Defendants shall calculate numeric soil vapor cleanup levels which achieve the narrative Performance Standard set forth in this section pursuant to section 4.1.6.

2.1.2 Performance Standard for Remedy Required Subsites

The narrative Performance Standard for the SVE Remedy at the Remedy Required Subsites is to operate each SVE subsystem until VOC concentrations are reduced such that soil contamination will not result in water quality impacts to the SGZ above the Performance Standards set forth in Table 2.3. Further, the SVE system at Remedy Required Subsites will mitigate migration of soil vapors outside of Remedy Required Subsites and to the SGZ. Settling Defendants shall calculate numeric soil vapor cleanup levels which achieve the narrative Performance Standard set forth in this section pursuant to section 4.1.6.

2.1.3 Performance Standard Within the TI Zone

The narrative Performance Standard for the SVE Remedy within the TI Zone is to laterally and vertically contain VOC soil vapors in subsurface soils until VOC concentrations are reduced such that ceasing operation of the SVE Remedy will not cause water quality impacts to the SGZ outside the TI Zone or to the Regional Aquifer above the Performance Standards set forth in Table 2.3.

2.1.4 Performance Standards for SVE System Off-Gas Control

The Performance Standards for the SVE off-gas treatment system are as follows:

- i) comply with all of the ARARs for air emissions described in section 11.1of the ROD.
- ii) attain a reduction of no less than 85 percent of influent VOC concentrations.

Routine monitoring of off-gas will be completed in accordance with the SVE O&M Manual to ensure compliance with all ARARs set forth in section 11.1.3 of the ROD and Performance Standards. If the off-gas treatment system should fail, Settling Defendants shall repair and/or shut down the SVE system until the emission controls are again effective and meet Performance Standards. If determined necessary by EPA, Settling Defendants shall install additional treatment technologies to ensure compliance with the Performance Standards described in this section 2.1.4.

2.2 SGZ REMEDY

The Settling Defendants shall perform the SGZ Remedy as follows:

Installation of groundwater extraction wells to prevent migration of SGZ contamination into the Regional Aquifer or currently clean portions of the SGZ at levels that cause exceedances of the Performance Standards set forth in Table 2.3. The approximate lateral limits of the SGZ VOC plume are shown in Appendix E of the Consent Decree. EPA determined in the ROD that restoration of the SGZ to the Performance Standards set forth in Table 2.3 is technically impracticable inside the TI Zone. Outside the TI Zone, Settling Defendants shall design the SGZ Remedy to restore the SGZ to the Performance Standards set forth in Table 2.3. Settling Defendants shall treat extracted water as specified in section 2.2.3.

Construction of extraction wells and conveyance pipelines through the residential neighborhood west of the Airport Property. The SGZ Remedy will be conducted in three phases (pursuant to section 5.2, below) due to the possible difficulties in achieving cleanup of the SGZ and the potential negative impacts associated with construction Off-Airport Property.

Evaluation of the following groundwater treatment technologies based on the criteria set forth in section 3.0 of this SOW: (i) air-stripping with off-gas treatment, (ii) carbon adsorption (alone or as a polishing step), (iii) ultraviolet oxidation for polishing or (iv), if accepted by the U.S. Air Force, treatment at the existing treatment system on the Air Force Plant 44 air stripping plant. Construction and operation of a Groundwater Treatment System which implements the EPA approved technology.

If air stripping is selected as the treatment technology pursuant to section 3.0 of this SOW, evaluation of the following off-gas treatment technologies: (i) catalytic oxidation, (ii) thermal oxidation, (iii) vapor-phase carbon and (iv) vapor-phase resin adsorption, and implementation of the EPA approved technology.

Evaluation of the following discharge options based on the criteria set forth in section 3.0 of this SOW: (i) reinjection wells, (ii) reinjection trenches, (iii) sanitary sewer, (iv) industrial reuse, and (v) discharge to the Air Force Plant 44 reinjection well system and implementation of the EPA approved discharge option. The ROD states that reinjection is the preferred discharge option.

Institutional controls to limit use of the Airport Property to uses compatible with airport operations and prohibiting the construction of production wells in the SGZ for untreated potable use will be implemented in accordance with Section IX of the Consent Decree.

2.2.1 Performance Standards for the SGZ Inside the TI Zone

The Performance Standard for Remediation of the SGZ Inside the TI Zone is to provide lateral and vertical hydraulic containment of contaminated shallow groundwater until contaminant concentrations inside the TI Zone are reduced to levels at which ceasing operation of the Groundwater Treatment System in the TI Zone will not cause a water quality impact in excess of the water quality standards set forth in Table 2.3 to the SGZ outside the TI Zone or to the Regional Aquifer as demonstrated by groundwater modelling and monitoring of the Regional Aquifer and SGZ.

2.2.2 Performance Standards for SGZ Outside the TI Zone

The Performance Standard for remediation of the SGZ outside the TI Zone is (i) to restore the SGZ outside the TI Zone to the Performance Standards set forth in Table 2.3, and (ii) to prevent migration of VOCs into the Regional Aquifer or currently clean portions of the SGZ at levels that cause an exceedance of the Performance Standards set forth in Table 2.3.

2.2.3 Performance Standards for Treated Discharge from Groundwater Treatment System

The Performance Standards for reinjection of treated groundwater are set forth in Table 2.3. For the other discharge options, specific discharge performance standards cannot be developed until the option has been selected and the appropriate regulatory agencies have been contacted to discuss their requirements as set forth in section 10.4.4.1 of the ROD.

2.3 PCB SOILS REMEDY

Settling Defendants shall conduct the PCB Soils Remedy as follows:

Excavation of soils and sludges exceeding the Performance Standard. Backfilling and grading of the excavated areas.

Off-site disposal of soils and sludges exceeding the Performance Standard to disposal facility(ies) which is(are) approved under EPA's CERCLA Off-Site Rule.

Implementation of institutional controls to restrict the Airport Property to non-residential uses compatible with airport operations in accordance with Section IX of the Consent Decree.

2.3.1 Performance Standards for PCB Soils Remedy

The Performance Standard for PCB and metals contaminated soils and sludges is to excavate and properly dispose of off-site all soils and sludges contaminated with PCBs in excess of the chemical specific Performance Standard (0.76 mg/kg PCB) and all soils and sludges contaminated with metals in excess of the chemical Performance Standards set forth in Table 2.4.

2.4 TAA LANDFILL REMEDY

Settling Defendants shall conduct the TAA Landfill Remedy as follows:

Closure in accordance with the Performance Standards, including, but not limited to, grading the landfill to provide a sloped surface; placing and compacting a 2-foot thick (minimum) clean soil cap over the graded fill materials; and seeding the cap with

drought resistant vegetation.

Access restrictions and closure and post-closure monitoring in accordance with the Performance Standards.

2.4.1 Performance Standards for TAA Landfill Closure

The Performance Standard requires proper closure of the landfill in accordance with the RCRA Subtitle D solid waste regulations, as implemented by the approved Arizona solid waste regulations.

3.0 PRE-DESIGN AND DESIGN

Settling Defendants shall conduct certain pre-design and design activities for each Individual Remedy described in section 2.0 above, including, the following:

- (1) Additional Field Investigations;
- (2) Remedial Design Work Plan;
- (3) Draft Technical Memorandum (30% Design);
- (4) Design Project Meeting;
- (5) Final Technical Memorandum; and,
- (6) Remedial Design Report (100% Design).

This section sets forth specifications and criteria for required pre-design and design activities. The design process is as follows.

Pursuant to this SOW, Settling Defendants shall schedule a Project Meeting with EPA prior to the completion of each Draft Technical Memorandum for each Remedy described in section 2.0 of this SOW, with the exception of PCB Soils Remedy. Ten days prior to such a meeting, Settling Defendants will submit to EPA a Draft Technical Memorandum proposing preliminary (30%) design and discussing the design constraints and other pertinent information. The Project Meetings will serve to function as a preliminary design review workshop, where the preliminary design will be presented by the Settling Defendants to EPA and EPA's comments and questions are discussed. The scope of the Project Meeting is presented in section 6.2 below. Following the Project Meeting, the Settling Defendants will submit a Final Technical Memorandum for EPA review and approval. Following EPA's review and approval of the Final Technical Memorandum, the Settling Defendants shall develop and submit the Remedial Design Report for EPA review and approval.

Each Technical Memorandum required by this section shall contain at a minimum the

following:

- (1) Field Investigation results;
- (2) design criteria;
- (3) results of any additional pre-design work;
- (4) evaluation of treatment technologies and/or enhancements, where applicable;
- (5) project delivery strategy;
- (6) preliminary plans, drawings and sketches;
- (7) required specifications in outline form; and
- (8) preliminary construction schedule.

Each final Design Report required by this section shall include, at a minimum, the following:

- (1) complete (100%) design analysis;
- (2) final plans and specifications;
- (3) Construction Quality Assurance Project Plan (CQAPP);
- (4) Performance Standards Verification Plan;
- (5) Contingency Plan;
- (6) Remedial Action Work Plan.

In the Technical Memoranda for the SGZ and SVE Remedies, Settling Defendants shall evaluate each of the technological options described in this section using the criteria identified in 40CFR 300.430(f)(1)(i). These criteria are:

Overall Protection of Human Health and the Environment;

Compliance with ARARs;

Long-term Effectiveness and Permanence;

Reduction of Toxicity, Mobility and Volume;

Short Term Effectiveness;

Implementability; and

Cost.

As part of the EPA's comments on the Draft Technical Memoranda for SGZ and SVE Remedies, EPA will provide the Settling Defendants information regarding the following two criteria to be used to evaluate technological options:

State Acceptance; and Community Acceptance.

3.1 REMEDIAL DESIGN WORK PLAN

Settling Defendants shall submit a Remedial Design Work Plan which details the manner in which the pre-design and design activities for each Individual Remedy included in the Remedial Action will be implemented.

The Remedial Design Work Plan will include a comprehensive description of the plans and specifications to be prepared and a comprehensive design management schedule for the completion of each major activity and submission of each Deliverable. Settling Defendants shall include the following in the Remedial Design Work Plan:

- a summary of the existing data including physical and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site:
- a detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to EPA;
- a project management plan, including a data management plan, which will address the requirements for project management systems, including tracking, sorting, and retrieving the data along with an identification of the software to be used, minimum data requirements, data format, and backup data management. The data management plan will address both data management and document control for all activities conducted during the Remedial Design and Remedial Action; and
- a communication plan for preparing and disseminating information to the public regarding the Remedial Design and Remedial Action.

3.2 PRE-DESIGN AND DESIGN ACTIVITIES FOR SVE REMEDY

3.2.1 Plug-In Subsites

Section 3.2.1 sets forth pre-design and design activities for the SVE Remedy for the Plug-In Subsites.

3.2.1.1 Plug-In Subsites Soil Gas Field Investigation and Technical Proposal

Settling Defendants submitted to EPA a Plug-In Subsites Soil Gas Field Investigation Technical Proposal that sets forth a plan for conducting depth-specific soil gas

investigations to support the vadose zone modeling described in Section 3.2.1.4. The Soil Gas Field Investigation Technical Proposal included a Quality Assurance Project Plan ("QAPP") and a Sampling and Analysis Plan ("SAP"), each conforming to the EPA approved RI/FS Plan, TIAA Volume QAPP (DBS&A, February 28, 1995).

The Field Investigation Technical Proposal for the Plug-In Subsites and groundwater was submitted on June 25, 1998 and approved by EPA with comment on July 9, 1998. The field investigations were conducted between July 17 and August 14, 1998. The activities and results of the field investigations are summarized in the report entitled "Results of the Plug-In Sites Investigation" submitted to EPA on November 12, 1998.

3.2.1.2 <u>Vadose Zone Impact Analyzes Technical Proposal</u>

Settling Defendants submitted to EPA a Vadose Zone Impact Analyzes Technical Proposal which set forth proposed methodologies for implementing the Plug-In Process set forth in the ROD and Section 3.2.1.4 of this SOW.

Based upon the results reported in the Field Investigation Summary Report, the Vadose Zone Analyzes Technical Proposal proposed Plug-In Sites for modeling using either (i) the mixing cell calculations or (ii) the T2VOC computer model. The Vadose Zone Impact Analyzes Technical Proposal using the mixing cell approach was submitted on July 21, 1998 and approved by EPA with comments on August 5, 1998. A technical proposal regarding the T2VOC modelling approach was submitted to EPA on October 20, 1998.

3.2.1.3 <u>Vadose Zone Impact Analyzes Modeling Report</u>

Settling Defendants shall submit to EPA a Vadose Zone Impact Analyzes Modelling Report which (i) will report the Plug-In Process modelling analysis and, (ii) based on the Plug-In Process Criteria set forth in the ROD and section 3.2.1.4 of this SOW, recommend each Plug-In Subsite either for (i) NFA, (ii) SVE remediation or (iii) monitoring only.

3.2.1.4 Plug-In Process: Methodology and Criteria

Consistent with section 10.1.1.1 of the ROD, Settling Defendants shall use the Plug-In Process to estimate the maximum effect that the VOC mass distribution at each Plug-In Subsite could potentially have on groundwater quality in the future and to determine if that Plug-in Subsites exceeds the narrative Performance Standard. The Plug-In Process is

as follows:

Mixing Cell Calculation Method

Settling Defendants shall model each Plug-In Subsite using the mixing cell calculations described in this subsection. When performing such calculations, Settling Defendants shall assume that the entire VOC mass in the Vadose Zone instantly arrives into the first saturated groundwater unit underlying that area. Settling Defendants shall submit such calculations to EPA for its review and approval in the Vadose Zone Impact Analysis Modelling Report.

If such calculations indicate that the soil contamination at the Plug-In Subsite will not exceed the narrative Performance Standard, Settling Defendants may propose the Plug-In Subsite for NFA, subject to EPA approval. If the results indicate non-compliance with the narrative Performance Standard, Settling Defendants shall model the data for the Plug-In Subsite using the computer model, T2VOC.

The Vadose Zone Impact Analyzes Mixing-Cell Results were submitted on November 12, 1998. The results indicated that all Plug-In Subsites failed to comply with the narrative Performance Standard based on the mixing cell calculations.

Vadose Zone/Groundwater Modeling

Using the T2VOC computer model developed in the Vadose Zone Impact Analyzes Technical Proposal (section 3.2.1.2), the Setting Defendants shall model each of the Plug-In Subsites not proposed for NFA. In using such model, Settling Defendants shall use the T2VOC input parameters set forth in the Preliminary Site Characterization Summary (DBS&A, 1995) and shall use the recharge rate of no less than 3 percent of Tucson International Airport's average annual precipitation which is 11 inches (derived from NCDC Cooperative Stations, 1948 to 1995).

If the computer modeling results indicate that any such modeled Plug-In Subsite does not exceed the narrative Performance Standard, the Settling Defendants may propose the Plug-In Subsite for monitoring only, subject to EPA approval. If EPA approves any Plug-In Subsite for monitoring only, Settling Defendants shall conduct long-term monitoring of such Plug-In Subsite in accordance with section 5.1.4 of this SOW.

If the computer modelling results indicate that any such modelled Plug-In Subsite exceeds the narrative Performance Standard, Settling Defendants shall implement the SVE Remedy selected in the ROD at that Plug-In Subsite in accordance with the Soil Remedial Design for Plug-In Subsites described in section 3.2.2 of this SOW.

3.2.2 SVE Remedy Technical Memorandum

Settling Defendants shall submit to EPA a SVE Remedy Technical Memorandum for the Plug-In Subsites and the Remedy Required Sites. The SVE Remedy Technical Memorandum will set forth the preliminary SVE Remedial Design, including a summary of the modeling results for the Plug-In Subsites.

Settling Defendants shall submit the Technical Memorandum as a single document containing two parts for review at a Project Meeting. Part I of the Technical Memorandum will set forth the proposed Remedial Design for the Remedy Required Sites and Part II of the Technical Memorandum will set forth the proposed Remedial Design for the Plug-In Subsites.

In addition to the requirements of section 3.0, the SVE Technical Memorandum will also include the following:

- i) an evaluation of the off-gas treatment technologies conducted in accordance with section 3.2.2.2 and a recommendation of one or more such technologies for use at the Plug-In Subsites (including no treatment) and the Remedy Required Sites;
- ii) an evaluation of potential enhancement technologies conducted in accordance with section 3.2.2.1; and
- iii) conceptual SVE facility layout.

3.2.2.1 SVE Remedy Technical Memorandum: Evaluation of Enhancement Options

The SVE Remedy Technical Memorandum will include an evaluation of the following potential SVE enhancement options in accordance with the criteria set forth in section 3.0 of this SOW:

- i) capping/paving to increase lateral influence of SVE wells and to prevent excessive short-circuiting;
- ii) bioventing to enhance the naturally occurring biodegradation processes, e.g. natural attenuation, and intrinsic remediation;
- iii) pneumatic fracturing of the subsurface with high pressure air to increase vadose zone permeability; and
- iv) multi-phase extraction to extract soil gas, upper-most saturated zone groundwater, and/or DNAPL, and to lower the water table.

Settling Defendants shall evaluate each of the above enhancement options for use at each of the Plug-In Subsites and at each of the Remedy Required Subsites.

Settling Defendants shall evaluate the enhancement options set forth in subparagraph (ii) and (iv) for use within the TI Zone.

Settling Defendants shall evaluate whether or not effective implementation of the SVE system at such subsite would require using any of one or any combination of the enhancement technologies.

The Remedial Design Report will include Settling Defendants' proposal for employing or not employing the enhancement option(s) listed above at each SVE subsite.

3.2.2.2 SVE Remedy Technical Memorandum: Evaluation of Off-Gas Treatment Options

The SVE Remedy Technical Memorandum will include an evaluation of the following technology options for treatment of SVE off-gases:

- i) no treatment (Plug-In Subsites only);
- ii) catalytic oxidation;
- iii) thermal oxidation;
- iv) vapor-phase carbon adsorption; and
- v) vapor-phase resin adsorption.

Settling Defendants shall evaluate each of the above off-gas treatment options for use at each of the Plug-In Subsites.

Settling Defendants shall evaluate the off-gas treatment options set forth in subparagraphs (ii) through (v) for use at the Remedy Required Sites.

Settling Defendants shall submit to EPA for review and approval a proposal for employing or not employing the off-gas treatment option(s) listed above at each SVE subsite in the Technical Memorandum.

The evaluation will be conducted in accordance with the criteria set forth in section 3.0.

3.2.3 SVE Remedy Remedial Design Report

Settling Defendants shall submit to EPA for review and approval a SVE Remedy Remedial Design Report. The Remedial Design Report will include a Complete Design Analysis which discusses the proposed final design, design calculations and an analysis supporting the design approach.

With respect to the Plug-In Subsites selected for remediation pursuant to this SOW, the Remedial Design Report will provide for the installation of SVE wells for Plug-In Subsites in locations selected to achieve the Plug-In Subsite Performance Standards. The Remedial Design Report shall also provide for installation of SVE wells in locations required to achieve the Performance Standards for the Remedy Required Sites.

3.3 PRE-DESIGN AND DESIGN ACTIVITIES FOR SGZ REMEDY

This section sets forth pre-design and design activities for the SGZ Remedy.

3.3.1 SGZ Remedy Field Investigation

Settling Defendants conducted additional monitoring of the Shallow Groundwater Zone and the Regional Aquifer in the areas described below ("Groundwater Field Investigation") to further evaluate groundwater flow and contaminant transport from the SGZ and to the Regional Aquifer and to collect additional data for Remedial Design. The field investigations included the installation of groundwater monitoring wells (or MPSG/GW wells where applicable) and sampling of new and existing wells.

Settling Defendants installed monitoring wells at the following areas:

- i) downgradient of the TAA Landfill;
- ii) Credit Union Dump;
- iii) West End of Runway 3;
- iv) North End of Samsonite Building D-167;
- v) South Ramp and Drains;
- vi) Gravel Subunit in Zone E; and
- vii) Upper Regional Aquifer in Zone E.

Settling Defendants collected groundwater samples at all newly installed monitoring wells and submitted such samples to a laboratory for analysis. The Groundwater Field Investigation included further characterization of the gravel subunit which is approximately 5 feet to 15 feet thick and located within in the area identified on Figure 6 of the ROD as Unit 4 in Zone E.

The Groundwater Field Investigation Summary Report summarized field investigation activities performed by Settling Defendants, and presented the results and conclusions from these field investigations. The Groundwater Field Investigation Summary Report included validated data received from the laboratory.

A Field Investigation Technical Proposal was submitted on June 25, 1998 and approved by EPA with comment on July 9, 1998. The field investigations were conducted between July 17 and August 14, 1998. The activities and results of the field investigations are summarized in the summary report entitled "Results of the Plug-In Sites Investigation" submitted to EPA on November 12, 1998. A Revised Scope of Work for a 72-Hour Constant Rate Discharge Pumping Test of the Gravel Subunit was submitted on June 18, 1998 and approved by EPA on June 23, 1998. An Aquifer Test Final Report was submitted on August 28, 1998.

Upon the Effective Date of the Consent Decree, the Settling Defendants shall continue to implement the EPA-approved Groundwater Monitoring Sampling and Analysis Plan (DBS&A, June 1997). Upon EPA's request, Settling Defendants shall revise the long term monitoring program in the SGZ Performance Standards Verification Plans required in section 4.1.6 of this SOW.

Prior to completing the groundwater Remedial Design described in section 3.3, Settling Defendants shall complete a baseline round of groundwater sampling and analysis for all existing monitoring wells at the Site. Settling Defendants shall use this baseline monitoring data to establish a database for the Site and to confirm data in the RI/FS.

3.3.2 SGZ Remedy Technical Memorandum

Settling Defendants shall submit to EPA a Draft Design Technical Memorandum for the SGZ Remedy for review at a Project Meeting. The Draft SGZ Remedy Technical Memorandum will set forth the preliminary (30%) SGZ Remedial Design.

Settling Defendants shall submit the Draft and Final Technical Memorandum as a single documents containing three parts for review at a Project Meeting. Part I of the Technical Memorandum will set forth the proposed Remedial Design for attaining the Performance Standards for SGZ in the TI Zone.

Part II of the Technical Memorandum will set forth the proposed Remedial Design of Phase I for attaining the Performance Standards for the SGZ Outside the TI Zone. Phase I of the SGZ Remedy will consist of construction and operation of the following; (i) an Airport-Property shallow groundwater containment system; (ii) an Off-Airport Property shallow groundwater containment system using a maximum of six groundwater extraction wells; and (iii) a groundwater treatment system.

Part III of the Technical Memorandum will set forth the proposed Remedial Design for the selected enhancement technology to be employed on the Airport Property.

The phased approach for implementing the SGZ Remedy Outside the TI Zone is addressed in section 5.2.

The SGZ Remedy Technical Memorandum will include the following:

- i) an evaluation of the groundwater treatment technology options;
- ii) an evaluation of potential enhancement technology options;
- iii) off-gas treatment technology options;
- iv) treated water discharge options; and,
- v) pipeline routing options.

The evaluation and recommendation of the above technologies and options are described in more detail in the following sections.

3.3.2.1 SGZ Remedy Technical Memorandum: Evaluation of Groundwater Treatment Technologies

The SGZ Remedy Technical Memorandum will include an evaluation of the following treatment technologies using the criteria set forth in section 3.0:

- i) air stripping with off-gas treatment;
- ii) carbon adsorption (alone or as a polishing step);
- iii) discharge to AFP44 (extracted groundwater would be pumped to AFP44 for treatment); and
- iv) UV oxidation (as a polishing step only).

The SGZ Remedy Technical Memorandum will include a recommendation of the technology best meeting the section 3.0 criteria.

3.3.2.2 SGZ Remedy Technical Memorandum: Off-Gas Treatment Technologies

Settling Defendants shall evaluate the following options for treating off-gases from air stripping using the criteria in section 3.0:

- i) catalytic oxidation;
- ii) thermal oxidation;
- iii) vapor phase carbon adsorption; and
- iv) vapor phase resin adsorption.

Settling Defendants shall submit to EPA for its review and approval the evaluation and a

proposal recommending one of the off-gas treatment technologies in the SGZ Remedy Technical Memorandum. Upon EPA approval, Settling Defendants shall incorporate the approved off-gas treatment technology in the Remedial Design Report.

3.3.2.3 SGZ Remedy Technical Memorandum: Discharge of Treated Groundwater

Settling Defendants shall evaluate the following options for discharging treated groundwater using the criteria set forth in section 3.0:

- i) reinjection wells;
- ii) reinjection trenches;
- iii) sanitary sewer;
- iv) industrial reuse; and
- v) discharge to AFP 44 reinjection well system.

The SGZ Technical Memorandum will include a recommendation of the option best meeting the section 3.0 criteria.

3.3.2.4 SGZ Remedy Technical Memorandum: Pipeline Routing

In selecting the routes for pipelines transporting extracted groundwater to the treatment system, Settling Defendants shall submit to EPA for its review in the SGZ Remedy Technical Memorandum an evaluation and proposal recommending the most appropriate pipeline routes. This evaluation will consider the following factors:

Proposed Development; Traffic and Business Impacts; Disruptions to Residents; Location of Existing Utilities; and The TAA Master Plan.

3.3.2.5 SGZ Remedy Technical Memorandum: Evaluation of Enhancement Technologies

The SGZ Remedy Technical Memorandum will include an evaluation of the following enhancement technologies for use with the Groundwater Treatment System on the Airport Property (outside the TI Zone) using the criteria set forth in section 3.0:

i) electro-osmosis (as a potential extraction enhancement of shallow groundwater);

and

ii) bioaugmentation (as a potential in-situ treatment enhancement prior to for extraction and treatment of shallow groundwater).

The SGZ Remedy Technical Memorandum shall include a recommendation of the technology best meeting the section 3.0 criteria.

3.3.3 SGZ Remedial Design Report

Settling Defendants shall submit a SGZ Remedial Design Report for the SGZ Remedy as a single document containing three parts in accordance with the schedule set forth in Table 6.1. The three parts of the SGZ Remedial Design Report are described in section 3.3.2, above for the Technical Memorandum.

The SGZ Remedial Design Report will include a Complete Design Analysis which discusses the selected final 100% design, design calculations and an analysis with calculations supporting the design approach and specifications.

3.4 PRE-DESIGN AND DESIGN FOR PCB SOILS REMEDY

This section 3.4 sets forth pre-design and design activities for the PCB Soils Remedy.

3.4.1 PCB Soils Field Investigation

Settling Defendants shall conduct a PCB Soils Field Investigation to characterize the extent of PCB contamination in the following areas (generally depicted on Figure 3.1 attached):

- i) the drainage ditch from the outfall north of Former Structure 21 to the culvert at the West Side Drainage Area in Zone F; and
- ii) the floor drain network within Hangar 1.

Settling Defendants shall compare data collected during the PCB Soils Field Investigation to the PCB Performance Standards to determine the extent of contamination. The PCB Field Investigation Summary Report will summarize field investigation activities performed by Settling Defendants, and present the results and conclusions from these field investigations as outlined in Table 3.1. The PCB Field Investigation Summary Report will include validated data received from the laboratory.

3.4.2 Pre-Design Site Characterization of Canale System

Prior to completing the PCB Soils Remedial Design Report/Remedial Action Work Plan, Settling Defendants shall collect preliminary data for the Canale system. Settling Defendants shall excavate a test pit to determine the vertical and horizontal extent of the PCB contamination using the Performance Standards to characterize the Canale system.

Settling Defendants shall collect one soil sample from each of the following locations:

- i) a joint in the Canale system piping,
- ii) the base of the piping,
- iii) one foot below the base of the piping,
- iv) three feet below the base of the piping,
- v) one foot from either side of the centerline of the Canale Piping,
- vi) two feet from either side of the centerline of the Canale piping, and
- vii) three feet on either side of the centerline of the Canale piping.

Soil samples shall be analyzed for PCBs and metals. Concrete piping encountered during the excavation shall be sampled as well. Upon completing such sampling activities, Settling Defendants shall backfill all excavated material, including concrete piping, into the test pit.

Settling Defendants shall analyze sludges in the Canale system using the slump test and RCRA TCLP. Settling Defendants shall conduct stabilization tests on any sludges that contain metals in excess of the TCLP criteria and/or fail the slump test (ASTM C-143). Settling Defendants shall present the analytical results from the data collection activities in the PCB Soils Remedial Action Work Plan.

3.4.3 PCB Soils Remedial Design Report/Remedial Action Work Plan

Settling Defendants shall submit a PCB Soils Remedial Design Report/Remedial Action Work Plan to EPA for its review and approval. The PCB Soils Remedial Action Work Plan will describe in detail the activities to be conducted during the Remedial Action and will attach a Field Sampling Plan (FSP).

Settling Defendants shall conduct the soil remediation activities in accordance with the Health and Safety Plan (HASP), and Contingency Plan for Transportation of Hazardous Waste from the PCB Soils Removal Action Work Plan established for the Removal Action conducted under UAO No.96-14 (CRA, December 1996).

3.5 DESIGN ACTIVITIES FOR TAA LANDFILL REMEDY

This section 3.5 sets forth pre-design and design activities for the TAA Landfill Remedy.

3.5.1 TAA Landfill Remedy Technical Memorandum

Settling Defendants shall submit to EPA a draft Technical Memorandum for the TAA Landfill Remedy for review at a Project Meeting. The Technical Memorandum will set forth the preliminary (30%) Landfill Remedy Remedial Design and will include a topographical survey of the TAA Landfill.

3.5.2 Remedial Design Report for the TAA Landfill Remedy

Settling Defendants are required to submit a Remedial Design Report for the TAA Landfill. The Remedial Design Report shall include the following:

a typical cross-section of the cap; the present surface contours of the TAA landfill; cut and fill balances; the source of soil for the cap; preliminary proposed final contours; other pertinent design criteria; and closure and post-closure monitoring plan.

Settling Defendants shall close the TAA Landfill in accordance with 40 CFR Part 258, as enforced by State RCRA Subtitle D regulations, the ROD and the Performance Standard described in section 2.4s. Since the landfill is within the TIAA Superfund Site, a State permit is not required to implement the TAA Landfill Remedy.

The Design Report will provide for (i) use of a combination of imported and existing fill materials to achieve the required minimum and maximum surface grades of 2% and 20%, respectively; (ii) placement and compacting of a minimum 2-foot thick clean soil cap layer over the fill materials to provide a reduction of infiltration or precipitation to prevent contaminant migration; (iii) placement and maintenance of drought resistant vegetation.

The Remedial Action Work Plan for the TAA Landfill Remedy shall include a description of those measures to be employed by the Settling Defendants during construction of the cap to mitigate accidental releases.

4.0 REMEDIAL ACTION DOCUMENTS

4.1 REMEDIAL ACTION WORK PLAN

Settling Defendants shall submit a Remedial Action Work Plan for each Individual Remedy described in section 2.0. Settling Defendants shall submit each Remedial Action Work Plan as part of the Remedial Design Report for such Individual Remedy. The Remedial Action Work Plan will contain the following:

- i) a description of each construction activity and associated reporting requirements;
- ii) a schedule for completion of construction;
- iii) a Project Management Plan which outlines the manner in which Settling Defendants will select contractors and supervise construction and a proposed Remedial Action team:
- iv) a Construction Quality Assurance Plan and a methodology for implementation thereof;
- v) a method for completing the operational test of the treatment systems to demonstrate that the Performance Standards are being met for the treated groundwater and the atmospheric discharges;
- vi) a Construction Contingency Plan and a methodology for implementation thereof;
- vii) a Construction Health and Safety Plan, which shall include procedures for decontaminating equipment and disposing of contaminated materials; and
- viii) a Performance Standards Verification Plan for the SVE Remedy, the SGZ Remedy and the PCB Soils Remedy.

Settling Defendants shall include in the Remedial Action Work Plan a complete set of construction drawings and specifications for the selected design for each Individual Remedy.

Settling Defendants shall prepare the Remedial Action Work Plan in accordance with EPA's guidance for Remedial Action Work Plans. Specifications for the Project Management Plan, Construction Quality Assurance Plan, Construction Contingency Plan, Construction Health and Safety Plan and Performance Standards Verification Plans are set forth below.

Settling Defendants shall include in the Remedial Action Work Plan a schedule for implementation of all Remedial Action tasks identified in the final design submittal and shall identify the initial formulation of the Settling Defendants' Remedial Action Project Team.

4.1.1 Project Management Plan

The Remedial Action Work Plan will include a Project Management Plan that contains the following:

- i) detailed procedures for coordinating construction activities during construction;
- ii) identification of a construction representative who will be responsible for work at the construction of the Remedial Action;
- iii) identification of key project management personnel responsible for construction of the Remedial Action with a description of their duties, and an organization chart designating lines of authority; and
- iv) detailed procedures for administering and obtaining EPA review and approval of changes that are modifications from the design criteria and/or treatment processes specified in the Remedial Design Report.

4.1.2 Construction Quality Assurance Plan

The Remedial Action Work Plan will include a Construction Quality Assurance Plan that contains the following:

- i) a description of the quality control (QC) organization;
- ii) the name, qualifications, duties, authorities, and responsibilities of each person assigned a QC function;
- iii) a description of the observations and control testing that will be used to monitor the construction and/or installation of the components of the construction. This includes information that demonstrates that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards. Any laboratories to be used will be specified. Acceptance/rejection criteria and plans for implementing corrective measures will be addressed;
- iv) a schedule for managing submittals, testing, inspections, and any other quality assurance (QA) function (including those of contractors, subcontractors, fabricators, suppliers, purchasing agents, etc.) that involve assuring quality workmanship, verifying compliance with the plans and specifications, or any other QC objectives;
- v) reporting procedures and reporting format for QA/QC activities including such items as: daily summary reports; schedule of data submissions; inspection data sheets; problem identification and corrective measures reports; evaluation reports;

acceptance reports; and final documentation; and

vi) a list of definable features of the work to be performed. A definable feature of work is a task that is separate and distinct from other tasks and has separate control requirements.

4.1.3 Operational Testing

Operational tests will be conducted during the start-up and shakedown period for each of the treatment systems. The frequency of monitoring and the procedures used for the operational testing will be specified in the Remedial Action Work Plan.

4.1.4 Construction Contingency Plan

The Remedial Action Work Plan will include a Construction Contingency Plan that contains the following:

- i) the name of the person who will be responsible for coordinating response activities in the event of an emergency incident;
- ii) a description of procedures to be followed and authorities to be contacted in the event of an emergency incident;
- iii) a plan for conducting personnel monitoring in accordance with Occupational Safety and Health Act (OSHA) and National Institute for Occupational Safety and Health (NIOSH) regulations and guidance;
- iv) procedures for notifying nearby residents, local, state, and federal agencies in the event that unacceptable concentrations of airborne toxic constituents or other kinds of releases migrate off-Airport Property; and
- v) a spill control and countermeasures plan which includes the following:
 - a. contingency measures for potential spills and discharges of Waste Material, as a result of materials handling and/or transportation;
 - b. a description of the methods, means, and facilities required to prevent contamination of soil, water, atmosphere, and uncontaminated structures, equipment, or material from spills or discharges;
 - c. a description of the equipment and personnel necessary to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage. The collected spill material will be properly disposed of;
 - d. a description of the equipment and personnel to perform decontamination measures that may be required to remove spillage from previously

e. with respect to constructions activities conducted on the Airport Property, the provisions of the Construction Contingency Plan set forth in the Tucson Airport Authority Emergency Response Plan will be incorporated into the spill control and countermeasures plan.

4.1.5 Health and Safety Plan ("HASP")

The Remedial Action Work Plan will include a Health and Safety Plan that meets the requirements set forth in 29 CFR 1910.120 for hazardous operations and contains the following:

- i) identification of key personnel and a hazard communications plan;
- ii) site control measures;
- iii) health and safety risk analyzes;
- iv) a plan for employee training assignments;
- v) a medical surveillance plan;
- vi) personal protective equipment requirements;
- vii) a plan for air and personnel monitoring;
- viii) confined space entry procedures; and
- ix) decontamination procedures.

4.1.6 Performance Standards Verification Plans

The Remedial Action Work Plan will include an individual Performance Standards Verification Plan for each of the SVE Remedy, the SGZ Remedy and the PCB Soils Remedy that contains the following:

i) a Field Sampling Plan (FSP) defining in detail all the sampling and data gathering methods, sampling frequencies, and data quality objectives to be used for that Remedy;

- ii) a QA/QC Plan describing the QA and QC protocols which will be followed demonstrating compliance with Performance Standards;
- iii) a schedule and description of tasks that Settling Defendants shall perform to demonstrate compliance with the Performance Standards; and
- iv) with respect to soil gas and groundwater only, a proposed methodology for verifying that the Performance Standards for groundwater and soil gas are being met.

For the SVE Remedy, the Performance Standards Verification Plan will also specify the numeric soil vapor cleanup levels for the Plug-In Subsites and the Remedy Required Subsites which will achieve the narrative Performance Standards set forth in the ROD and section 2.1 of this SOW. The numeric soil vapor cleanup levels will be derived using a T2VOC model configuration based on the Vadose Zone Impact Analysis Technical Proposal. The numeric soil vapor cleanup levels are soil vapor concentrations (developed for each chemical at each Plug-In Subsite that caused an exceedance of the Performance Standard in the modelling) that are indicative of soil contamination that will not result in water quality impacts to the SGZ above the Performance Standards set forth in Table 2.3. The numeric cleanup levels will be presented graphically.

4.2 OPERATION AND MAINTENANCE MANUALS

Settling Defendants shall submit for EPA review and approval draft and final Operation and Maintenance Manuals for the SVE Remedy and the SGZ Remedy. Settling Defendants may combine these O&M Manuals into a single document. The draft Operation and Maintenance Manual (O&M Manual) shall be submitted to EPA prior to the start-up and operation of the treatment systems. Each O&M Manual will include:

- i) Equipment start-up and operator training:
 - a. technical specifications governing treatment systems;
 - b. requirements for providing appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up, and operation of the systems; and
 - c. schedule for training personnel regarding appropriate operational procedures once start up has been successfully completed.
- ii) Description of normal operation and maintenance:
 - a. description of tasks required for system operation;
 - b. description of tasks required for system maintenance;
 - c. description of prescribed treatment or operating conditions; and

- d. schedule showing the required frequency for each O&M task.
- iii) Description of potential operating problems:
 - a. description and analysis of potential operating problems;
 - b. sources of information regarding problems; and
 - c. common remedies or anticipated corrective actions.
- iv) Description of routine monitoring and laboratory testing of treatment systems:
 - a. description of monitoring tasks;
 - b. description of required laboratory tests and their interpretation;
 - c. required QA/QC; and
 - d. schedule of monitoring frequency.
- v) Description of alternate O&M:
 - a. should system fail, alternate procedures to prevent undue hazard; and
 - b. analysis of vulnerability and additional resource requirements should a failure occur.
- vi) Safety Plan:
 - a. description of precautions to be taken and required health and safety equipment, etc., for site personnel protection; and
 - b. safety tasks required in the event of systems failure.
- vii) Description of equipment:
 - a. equipment identification;
 - b. installation of monitoring components;
 - c. maintenance of site equipment; and
 - d. replacement schedule for equipment and installation components.
- viii) Records and reporting:
 - a. operating logs;
 - b. laboratory records;
 - c. mechanism for reporting emergencies; and
 - d. maintenance records.
- ix) Operation Flow Chart:
 - a. criteria to shut down individual wells; and
 - b. criteria to shut down and decommission the entire system.

4.3 CONSTRUCTION INSPECTION REPORTS

Within 10 days after completing construction and operationally testing each Individual Remedy, Settling Defendants shall convene a Construction Inspection meeting for such Remedy by notifying EPA not less than 10 days in advance. EPA and Settling Defendants shall conduct a walk-through inspection of the Individual Remedy during such Construction Inspection.

Within 20 days of the Construction Inspection Meeting, Settling Defendants shall submit to EPA for its review and approval a Construction Inspection Report that includes the following:

- i) an explanation of modifications made during the construction to the Design Report or PCB Soils Remedial Action Work Plan and the reasons for such changes;
- ii) EPA's observations and comments during the inspection and Settling Defendants responses to those observations and comments;
- iii) record drawings; and
- iv) a synopsis of the construction work defined in this SOW, a statement that the construction work has been completed and a request that EPA approve continuous operation of treatment systems.

5.0 REMEDIAL ACTION

This section describes activities to be completed by the Settling Defendants for remedial actions for each Individual Remedy described in section 2.0.

5.1 **SVE REMEDY**

Upon EPA approval of the Remedial Design Report, Settling Defendants shall construct one or more soil vapor extraction system(s) for the Plug-In Subsites and the Remedy Required Sites in order to meet the requirements of the Remedial Design Report and the Remedial Action Work Plan. Settling Defendants shall operate, maintain, and monitor the SVE Remedy in accordance with the Operation and Maintenance Manual and the Performance Standards Verification Plan to attain the Performance Standards for this Remedy as described in section 2.0.

5.1.1 Performance Monitoring

Settling Defendants shall monitor and collect data regarding the performance of the SVE system at each SVE Subsite in accordance with the procedures set forth in the EPA approved O&M Manual and Performance Standard Verification Plan. The data collected shall be submitted to EPA in the Progress Reports in the manner described in this SOW and Section X of the Consent Decree.

5.1.2 Performance Verification

Within six months following the date on which EPA determines that the SVE system(s) for the Remedy Required Sites are operational and functional, Settling Defendants shall submit to EPA for its review and approval the SVE Performance Standards Attainment Evaluation Report which will report the results of data collected during operation and monitoring of the SVE system(s) for the Remedy Required Sites and evaluate whether the SVE system(s) is performing as designed and is attaining the Performance Standards set forth in the ROD and section 2.0 of this SOW.

In addition to the evaluation of enhancements specified elsewhere in this SOW, if analytical data collected by Settling Defendants through monitoring of the combined SVE system influent or each individual SVE well indicates that a SVE system has reached an asymptotic change in removal efficiency, and the resultant concentrations for the Subsite measured exceed the numeric soil vapor cleanup levels for that Subsite, Settling Defendants may submit to EPA for review and approval a proposed enhancement work plan to evaluate potential SVE enhancements that may increase the removal efficiency of the system. If EPA approves the enhancement work plan, Settling Defendants shall implement the enhancement(s) and continue to monitor the removal efficiency of the SVE system.

Settling Defendants shall operate a SVE system(s) at each Plug-In Subsite and at the Remedy Required Sites (collectively, "SVE Subsites") until EPA determines that all numeric soil vapor cleanup levels based on the narrative Performance Standard have been attained per the methods and procedures identified in the Performance Standards Verification Plan. Upon such determination, Settling Defendants shall conduct the demonstration set forth in section 5.1.3 below.

5.1.3 Shut-Down and Closure Demonstration

Settling Defendants shall submit documentation and other information supporting that the SVE system(s) at any given SVE Site has met the requirements described in the EPA approved Plug-In Subsites Performance Standards Verification Plan or the Remedy Required Sites Performance Standards Verification Plan. If, after reviewing such

submittal, EPA determines that the requirements in the respective Verification Plan have been met, Settling Defendants will conduct the demonstration as set forth below.

Upon receiving notice that EPA has determined that Settling Defendants have met all requirements in the respective Performance Standards Verification Plan, Settling Defendants may cease operating the SVE system for the approved SVE Subsite.

Within 20 to 40 days following the date the Settling Defendants cease operating the SVE system for the approved SVE Subsite, Settling Defendants shall conduct a soil vapor sampling round under equilibrium conditions as described in the Performance Standards Verification Plan.. Settling Defendants shall sample a representative number of soil vapor monitor and extraction wells (as determined by EPA) within each SVE Subsite or portion of an SVE Subsite where SVE operations have ceased. If the detected concentrations in that area are above one or more numeric soil-vapor clean up levels, Settling Defendants shall recommence SVE operation for that area of the Subsite.

If the concentrations detected during the first sampling round, are at or below the numeric soil vapor cleanup levels, the Settling Defendants shall conduct a second sampling round at the same wells under-equilibrium conditions within 90 to 120 days following the date of the first round of sampling.

Settling Defendants may decommission the SVE Remedy for that SVE Subsite or portion of an SVE Subsite if both the first and second round of sampling indicate all soil vapor concentrations are at or below all the established numeric soil vapor clean up levels. If EPA determines that the Settling Defendants have not demonstrated in such sampling rounds that concentrations are at or below the established numeric cleanup level, Settling Defendants shall recommence operation of the SVE system for that Subsite.

The procedures set forth in this section 5.1.3 are summarized in the flow chart presented on Figure 5.1.

5.1.4 Groundwater Monitoring at Certain SVE Plug-In Subsites

Settling Defendants shall monitor over a 20-year period all Plug-In Subsites which are approved by EPA for no SVE Remedy based on vadose zone/groundwater modelling with T2VOC. Commencing on the date of such EPA approval and continuing on or before the 5th, 10th, 15th and 20th anniversary of such approval, Settling Defendants shall collect groundwater samples from the monitoring wells at each such Plug-In Subsite to evaluate the groundwater quality. If analytical results indicate that groundwater quality does not meet the Performance Standards, Settling Defendants shall re-evaluate the Plug-In Subsite. At the end of such 20-year period, if groundwater quality has

continued to meet the Performance Standards, Settling Defendants shall submit to EPA for its review and approval a proposal to cease monitoring the Plug-In Subsite.

Notwithstanding Paragraph 9(a) of the Consent Decree, if all of the Plug-in Subsites within a particular Parcel of the Restricted Airport Property require monitoring only pursuant to this section 5.1.4, and no other Individual Remedy is being performed with that same Parcel, EPA will terminate the notice recorded against the title of the Parcel in the manner set forth in Paragraph 9(a) of the Consent Decree.

5.2 SGZ REMEDY

Settling Defendants shall construct the SGZ Remedy in accordance with the Remedial Design Report and the Remedial Action Work Plan. The Settling Defendants shall operate, maintain, and monitor a Groundwater Treatment System to attain the Performance Standards for the SGZ (i) inside the TI Zone and (ii) outside the TI Zone, as set forth in section 2.0 of this SOW, the SGZ O&M Plan, and the SGZ Performance Standards Verification Plan. Such Groundwater Treatment System will include, but is not limited to, one or more treatment plants, a treated water end use system, extraction wells and conveyance piping to the treatment system.

Subject to Paragraph 13 of the Consent Decree, Settling Defendants shall operate the Groundwater Treatment System until all SGZ Performance Standards have been attained as demonstrated by the procedures set forth in this SOW and the SGZ Performance Standards Verification Plan.

Due to the possible difficulties in achieving cleanup of the SGZ outside the TI Zone and the potential negative impacts associated with construction of extraction wells and conveyance pipelines through the residential neighborhood west of the Airport Property, the Remedial Action and O&M for the SGZ Remedy will be conducted in three phases:

Phase I

Phase I of the SGZ Remedy will consist of construction and operation of the following Groundwater Treatment System:

- i) a TI Zone shallow groundwater containment system;
- ii) an Airport Property shallow groundwater containment system;
- iii) an Off-Airport Property shallow groundwater containment system using a maximum of six groundwater extraction wells.

Monitoring of the SGZ and the Regional Aquifer will be conducted during the implementation of Phase I of the SGZ Remedy in accordance with the SGZ O&M Plan, and the SGZ Performance Standard Verification Plan. Settling Defendants may use these data to further evaluate the practicability of restoring the SGZ (outside the TI Zone) to below groundwater cleanup standards.

Phase II

Within One (1) year after EPA approval of the Construction Inspection Report for the Phase I SGZ Treatment System, Phase II of the SGZ Remedy will commence consisting of the construction, operation, and evaluation of a pilot enhancement technology system on Airport Property.

Phase III

i) Airport Property

Two (2) years after EPA approval of the Construction Inspection Report for Phase I, the Settling Defendants, with EPA's approval, shall submit a formal analysis of the Airport Property SGZ Remedy, including assessments required by section 10.4.1.2 of the ROD, in accordance to the schedule described in Table 6.1. This evaluation will be documented and submitted to EPA for review and approval in a report entitled "Airport Property Performance Standard Attainment Evaluation Report", as described in section 5.2.2.2. Phase III of the SGZ Remedy will commence and may include: (a) the continuation of Phase I with or without modifications to the Groundwater Treatment System; or, (b) a determination by EPA that remediation of all or part of the SGZ is technically impracticable pursuant to Paragraph 13 of the Consent Decree.

ii) Off-Airport Property

Five (5) years after EPA approval of the Construction Inspection Report for Phase I, the Settling Defendants shall submit a formal analysis of the Off-Airport Property SGZ Remedy, including assessments required by section 10.4.1.1 and 10.4.1.2 of the ROD, in accordance to the schedule described in Table 6.1. This evaluation will be documented and submitted to EPA for review and approval in a report entitled "Off-Airport Property Performance Standard Attainment Evaluation Report", as described in section 5.2.2.3. Phase III may include: (a) the continuation of Phase I with or without modifications; or, (b) a determination by EPA that remediation of all or part of the SGZ is technically impracticable pursuant to Paragraph 13 of the Consent Decree.

iii) Enhancement Option

One (1) year after EPA approval of the Construction Inspection Report for Phase II, the Settling Defendants, with EPA's approval, shall submit a formal evaluation of the Airport Property pilot enhancement technology, in accordance with the schedule described in Table 6.1. This evaluation will be documented and submitted to EPA for review and approval in a report entitled Airport Property Performance Standard Attainment Evaluation Report, as described in section 5.2.2.2. Phase III may include the full-scale implementation of the enhancement option if deemed feasible and effective by EPA during Phase II, or the continuation of Phase II for further study. If the enhancement option will not be implemented, other options may be evaluated, as mutually agreed by the EPA and Settling Defendants.

Settling Defendants shall monitor the SGZ and the Regional Aquifer during the implementation of the SGZ Remedy in accordance with the EPA-approved SGZ O&M Manual and the SGZ Performance Standards Verification Plan.

5.2.1 Performance Monitoring of SGZ Remedy

This section presents the SGZ Remedy performance monitoring developed prior to the Effective Date of the Consent Decree. Table 5.1 referenced in this section presents a baseline, routine monitoring program that is designed to assess the general groundwater conditions and the shape of the VOC plume over time. This routine monitoring program does not account for special data needs, such as responding to the finding of previously undetected VOCs or VOC concentrations that have not been previously observed. The scope of monitoring for these special data needs is supplementary to Table 5.1. This table will be used to form the basis of the FSP that is part of the Performance Standards Verification Plan.

Table 5.1 may be modified with the consent of both EPA and the Settling Defendants.

5.2.1.1 Performance Monitoring of Containment

Commencing six months following the date on which EPA determines that the Groundwater Treatment System is operational and functional, Settling Defendants shall evaluate whether the Groundwater Treatment System is achieving the Performance Standards pertaining to containment of (i) the TI Zone, (ii) the SGZ underlying the Airport Property, and (iii) the SGZ underlying the Off-Airport Property using data collected in accordance with the SGZ O&M Plan and the SGZ Performance Standards Verification Plan. Settling Defendants shall submit such analysis to EPA in the Progress

Reports required pursuant to this SOW.

Settling Defendants shall collect hydraulic (water level) measurements from extraction and monitoring wells in conjunction with the performance monitoring program schedule described in section 5.2.1 above, and shall develop groundwater contours for the SGZ at the Site using such measurements. Settling Defendants shall verify hydraulic containment using (i) groundwater elevations and hydraulic gradients and, if appropriate (ii) over time, analytical data collected from groundwater monitoring wells which shows constant or reducing contaminant concentrations.

Settling Defendants shall submit such data and analysis to EPA in the Progress Reports. If, based upon such Progress Reports, EPA determines that alteration of the groundwater pumping rates are necessary to attain the SGZ Performance Standards, EPA may require Settling Defendants to alter such groundwater pumping rates.

5.2.1.2 Performance Monitoring of Groundwater Treatment System Discharge

Settling Defendants shall implement a monitoring program for the operation of the Groundwater Treatment System as specified in the EPA-approved O&M Manual and the Performance Standards Verification Plan for the SGZ Remedy. At a minimum, the Settling Defendants shall sample treatment system influent and treatment system effluent in accordance with Table 5.1.

5.2.1.3 Performance Monitoring of Groundwater

Settling Defendants shall sample the monitoring wells described in the Groundwater Monitoring Sampling and Analysis Plan (DBS&A, June 1997) from the Effective Date of the Consent Decree until EPA approval of the SGZ Performance Standards Verification Plan, which shall include a FSP. Upon EPA approval of the SGZ Remedy Performance Standards Verification Plan, Settling Defendants, shall, at a minimum, sample such monitoring wells in accordance with Table 5.1.

5.2.2 Performance Standard Attainment Evaluation Reports

5.2.2.1 TI Zone Performance Standard Attainment Evaluation Report

Six months following the date on which EPA determines that the Groundwater Treatment System is operational and functional, Settling Defendants shall submit to EPA for its review and approval the TI Zone Performance Standard Attainment Evaluation Report,

which will report the results of data collected during operation and monitoring of the Groundwater Treatment System and evaluate whether the Groundwater Treatment System is performing as designed and is attaining the Performance Standards set forth in the ROD and section 2.0 of this SOW.

EPA will review the TI Zone Performance Standard Attainment Evaluation Report to determine whether further action is necessary to achieve the Performance Standards for the TI Zone. If, based upon such Performance Standard Attainment Evaluation Report, EPA determines that the Remedy is not attaining the Performance Standards for the TI Zone, Settling Defendants shall complete additional Remedial Design in accordance with the procedures outlined in this SOW and the Consent Decree.

5.2.2.2 Airport Property Performance Standard Attainment Evaluation Report

Twenty-four months following the date on which EPA determines that the Groundwater Treatment System is operational and functional, Settling Defendants shall submit to EPA for review and approval the Airport Property Performance Standard Attainment Evaluation Report that will (i) report the results of data collected during operation and monitoring of the Groundwater Treatment System, (ii) evaluate whether the Groundwater Treatment System is performing as designed and is attaining the Performance Standards set forth in the ROD for and section 2.0 of this SOW and (iii) evaluates the performance of the enhancement technology study selected in the Remedial Design in the manner set forth in section 10.4 of the ROD and this SOW.

If, based upon the approved Airport Property Performance Standard Attainment Evaluation Report, EPA determines that the enhancement technology improves the effectiveness of the Groundwater Treatment System in attaining the Performance Standards for the Airport Property (outside the TI Zone) by reducing the cleanup times and/or overall costs, EPA may require Settling Defendants to implement such technology for the SGZ underlying the Airport Property. In such event, Settling Defendants shall design, construct, operate, maintain and monitor the enhanced Groundwater Treatment System in accordance with a work plan and schedule approved by EPA. In implementing such enhancement to the Groundwater Treatment System, Settling Defendants shall follow the design criteria set forth in section 3.0.

After submitting the approved Airport Property Performance Standards Attainment Evaluation Report, Settling Defendants, pursuant to Paragraph 13 of the Consent Decree, may petition EPA to determine that restoration of the SGZ underlying the Airport Property is technically impracticable.

If EPA approves such petition, Settling Defendants shall design, construct, operate, maintain and monitor any changes to the Groundwater Treatment System which EPA

determines are necessary to ensure that the SGZ Remedy in the expanded TI Zone meets the Performance Standards for the TI Zone set forth in section 10.4 the ROD and section 2.0 of this SOW. In implementing such changes to the Groundwater Treatment System, Settling Defendants shall follow the design criteria set forth in section 3.0 and shall perform the work in accordance with a work plan and schedule approved by EPA.

In accordance with Paragraph 13 of the Consent Decree, Settling Defendants may petition EPA on multiple occasions, presenting information supplementing that presented in the Airport Property Performance Standards Attainment Report.

5.2.2.3 Off-Airport Property Performance Standard Attainment Evaluation Report

Sixty months following the date on which EPA determines that the Groundwater Treatment System is operational and functional, Settling Defendants shall submit to EPA for review and approval the Off-Airport Property Performance Standard Attainment Evaluation that will (i) report the results of data collected during operation and monitoring of the Groundwater Treatment System, (ii) evaluate whether the Groundwater Treatment System is performing as designed and is attaining the Performance Standards set forth in section 10.4 of the ROD and section 2.0 of this SOW and (iii) if applicable, evaluate the performance of any enhancement or other modification of the Groundwater Treatment System implemented pursuant to section 5.2.2.2 above.

Upon EPA's approval of the Off-Airport Property Performance Standard Attainment Evaluation Report, Phase III of the Remedy will commence and may include: (a) the continuation of Phase I with or without modifications; or, (b) a determination by EPA that remediation of all or part of the SGZ is technically impracticable pursuant to Paragraph 13 of the Consent Decree.

After submitting the approved Off-Airport Property Performance Standard Attainment Evaluation Report, Settling Defendants, pursuant to Paragraph 13 of the Consent Decree, may petition EPA to determine that restoration of the SGZ underlying the Off-Airport Property is technically impracticable.

If EPA approves such petition, Settling Defendants shall design, construct, operate, maintain and monitor any changes to the Groundwater Treatment System which EPA determines are necessary to ensure that the SGZ Remedy in the expanded TI Zone meets the Performance Standards for the TI Zone set forth in the ROD and section 2.0 of this SOW. In implementing such changes to the Groundwater Treatment System, Settling Defendants shall follow the design criteria set forth in section 3.0 and shall perform the work in accordance with a work plan and schedule approved by EPA.

5.3 SGZ REMEDY SHUT-DOWN AND CLOSURE DEMONSTRATION

5.3.1 Qualification for Demonstration

Settling Defendants shall operate the Groundwater Treatment System until the SGZ Performance Standards described in section 2.0 are achieved.

Settling Defendants may submit documentation and information indicating that the SGZ Performance Standards have been met for the TI Zone, the Airport Property and/or the Off-Airport Property and request approval to conduct the demonstration set forth below. If EPA approves such request, Settling Defendants may temporarily cease operating the Groundwater Treatment System or an EPA-approved component of the Groundwater Treatment System during the demonstration.

EPA will approve such a demonstration if validated sampling data from one or more monitor wells within the sampled area during two sampling events separated by a minimum of 90 days are at or below the groundwater drinking water standards set forth in Table 2.3.

Notwithstanding such a demonstration, EPA may decline Settling Defendants' request to temporarily cease operating any component of the Groundwater Treatment System if EPA determines continued operation of such component is needed to maintain containment within any other area being remediated by the Groundwater Treatment System.

5.3.2 Demonstration

Upon EPA approval of Settling Defendants' request to conduct a demonstration of attainment of SGZ Performance Standards, Settling Defendants will temporarily cease operating the Groundwater Treatment System or EPA-approved component of the Groundwater Treatment System. Sampling and data verification will be consistent with the SGZ Performance Standards Verification Plan.

Settling Defendants shall submit the validated data to EPA in the Progress Reports on a quarterly basis.

If EPA determines that the validated data shows that the SGZ Performance Standards have been met for the demonstration area, EPA will notify Settling Defendants in writing of such determination.

If EPA determines that the data submitted does not demonstrate that the Performance

Standards have been met for the subject area, EPA will notify Settling Defendants in writing of such determination and Settling Defendants shall recommence operation of the Groundwater Treatment System or its component within 10 days following receipt of such notice.

If EPA determines that the Performance Standards have been met, Settling Defendants shall continue to monitor the SGZ in the area where operations have ceased on a semi-annual frequency for a 2-year period and shall submit such data to EPA within fifteen (15) days of receipt by the Settling Defendants. If EPA determines that the data indicates that Performance Standards are no longer being met in accordance with the demonstration made above, Settling Defendants shall immediately reactivate the Groundwater Treatment System or component upon receipt of notice of such determination. If Performance Standards continue to be met, Settling Defendants shall not be required to reactivate the Groundwater Treatment System.

5.3.3 <u>Technology Review</u>

At least once every five (5) years, Settling Defendants shall submit to EPA for its review a survey of remedial technologies to determine whether new technologies have been developed that can enhance remediation within the TI Zone. If EPA determines that promising new technologies have been developed it may require Settling Defendants to evaluate these technologies. Settling Defendants shall conduct an evaluation of the new technologies compared to the SGZ Remedy in the TI Zone using the criteria set out in section 3.0. If both Settling Defendants and EPA agree that a new technology is preferable under those criteria to the SGZ Remedy in the TI Zone, the Settling Defendants shall design, construct, operate, and evaluate a pilot study of this new technology, and shall evaluate the feasibility of full-scale implementation.

5.4 PCB SOILS REMEDY

Settling Defendants shall remove and properly dispose of all soils and sludges contaminated with PCBs and metals in excess of Performance Standards listed in Table 2.4 from the following areas (as generally depicted on Figure 3.1):

- i) Drainage and Ponding Areas;
- ii) Structures 21 and 30;
- iii) Hangar 1;
- iv) Sludges in the Canale System; and
- v) Soil Adjacent to the Canale System.

Settling Defendants shall sample and analyze excavated materials to identify those materials with PCB concentrations in excess of 50 mg/kg and/or metals concentrations exceeding RCRA Toxicity Characteristic Leaching Procedure (TCLP) criteria.

Settling Defendants shall dispose of PCB-contaminated material with concentrations less than 50 mg/kg in a RCRA Subtitle D approved landfill in compliance with EPA's off-site rule.

Settling Defendants shall dispose of PCB contaminated materials with concentrations exceeding 50 mg/kg in a TSCA and RCRA Subtitle C approved landfill in compliance with EPA's off-site rule.

Settling Defendants shall arrange for on- or off-Site treatment to stabilize any materials with metals concentrations exceeding RCRA TCLP criteria (Table 2.4) and/or any materials which fail the slump test (ASTM C-143) to below TCLP criteria prior to, or in conjunction with off-Site disposal.

Concurrent with the response activities for the PCB Soils Remedy described in this SOW, Settling Defendants shall conduct a confirmatory sampling and analysis program to confirm that Performance Standards in section 2.3 are met. Settling Defendants shall collect soil samples for analysis of PCB concentrations remaining in the soil following excavation using a sampling approach proposed by Settling Defendants as part of the Remedial Action Work Plan and approved by EPA.

If the analytical results from any area exceed the Performance Standards, Settling Defendants shall excavate additional soil from such area. In such event, Settling Defendants shall collect additional confirmation samples from the re-excavated area. Settling Defendants shall repeat such procedure until sample analyzes indicate the Performance Standards have been met.

5.5 TAA LANDFILL REMEDY

Settling Defendants shall close the TAA Landfill in accordance with the Performance Standards in section 2.4.

Landfill closure will include regrading the landfill; placing and compacting clean soil to form the cap, and revegetation with drought-resistant plants. Settling Defendants shall also implement the access controls set forth in the Remedial Design Report and the post-closure monitoring plan set forth in section 10.3 of the ROD.

6.0 OTHER DELIVERABLES

Deliverables required pursuant to the Consent Decree and this SOW are summarized in Table 6.1.

This section 6.0 sets forth specifications for Deliverables not discussed elsewhere in this SOW.

6.1 **PROGRESS REPORTS**

Pursuant to the Consent Decree, Settling Defendants are required to submit to EPA two (2) copies of written Progress Reports which include the following:

- i) a description of the actions which have been taken toward achieving compliance with the Consent Decree during the previous reporting period;
- ii) a summary of sampling results and tests and all other data received or generated by Settling Defendants in the previous reporting period;
- iii) all final laboratory data and validated data received or generated by Settling Defendants in the previous reporting period;
- iv) identification of work plans, plans, and other deliverables required by the Consent Decree completed and submitted during the previous reporting period;
- v) description of all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next reporting period and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts;
- vi) information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Remedial Action and Work activities, and a description of efforts made to mitigate those delays or anticipated delays;
- vii) a description of any modifications to the work plans or other deliverables that Settling Defendants have proposed to EPA or that have been approved by EPA;
- viii) a description of all activities undertaken in support of the Community Relations Plan during the previous reporting period and those to be undertaken in the next reporting period;

ix) containment information and an evaluation of the containment data (semi-annually).

6.2 PROJECT MEETINGS

Pursuant to this SOW, Settling Defendants are required to schedule a Project Meeting with EPA prior to the submittal of each Final Technical Memorandum for each Individual Remedy described in section 2.0 of this SOW, with the exception of the PCB Soils Remedy. Prior to such meeting, Settling Defendants are required to submit a Draft Technical Memorandum proposing preliminary (30%) design and discussing the design constraints and other pertinent information. Settling Defendants are required to submit a Final Technical Memorandum to EPA 20 days after the Project Meeting is completed. The Final Technical Memorandum shall incorporate the results of the Project Meeting and address comments raised by EPA at the meeting.

6.3 REMEDIAL ACTION COMPLETION REPORT

In accordance with Paragraph 47 of the Consent Decree and Table 6.1 of this SOW, Settling Defendants shall submit to EPA for review and approval a report documenting the completion of the Remedial Action ("Remedial Action Completion Report") upon concluding (after a pre-certification inspection with Settling Defendants and EPA) that the Remedial Action has been completed and Performance Standards have been attained for an Individual Remedy. A Remedial Action Completion Report may be submitted for each of the following Individual Remedies: SVE Remedy; the SGZ Remedy; the PCB Soils Remedy; and the TAA Landfill Remedy.

6.4 WORK COMPLETION REPORT

In accordance with Paragraph 48 of the Consent Decree, Settling Defendants shall submit to EPA for review and approval a report documenting completion of the Work ("Work Completion Report") upon concluding (after a pre-certification inspection with Settling Defendants and EPA) that all phases of the Work for an Individual Remedy, including O&M, have been fully performed. A Work Completion Report may be submitted for each of the following Individual Remedies: the SVE Remedy; the SGZ Remedy; the PCB Soils Remedy; and the TAA Landfill Remedy. The Work Completion Report shall include or incorporate by reference the Completion of Remedial Action Report for that Individual Remedy, together with information to support the conclusion that all phases of the Work, including O&M, have been fully performed.

FIGURES

for Appendix B, SOW

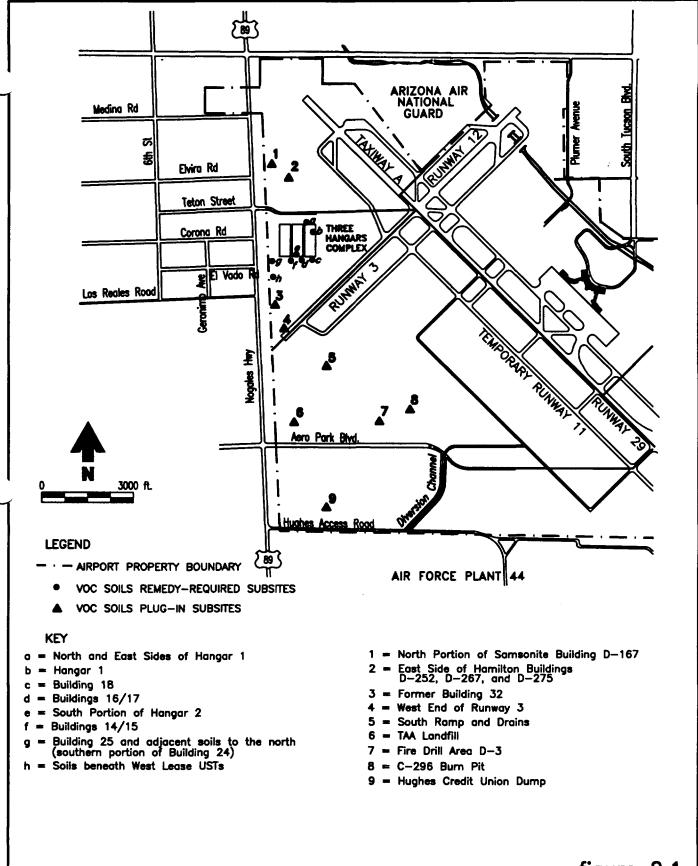
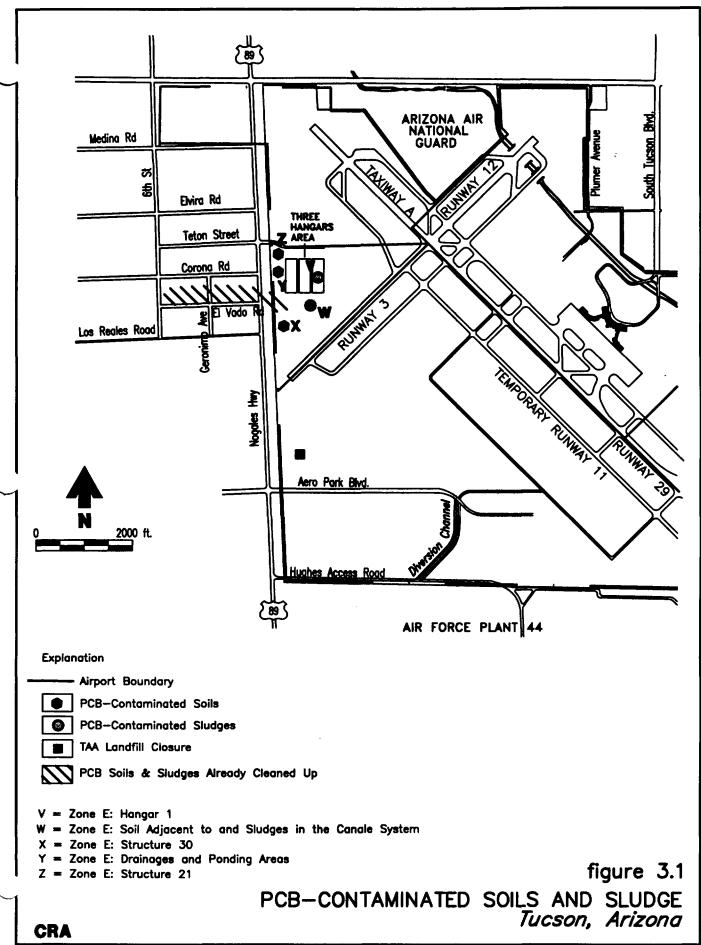


figure 2.1

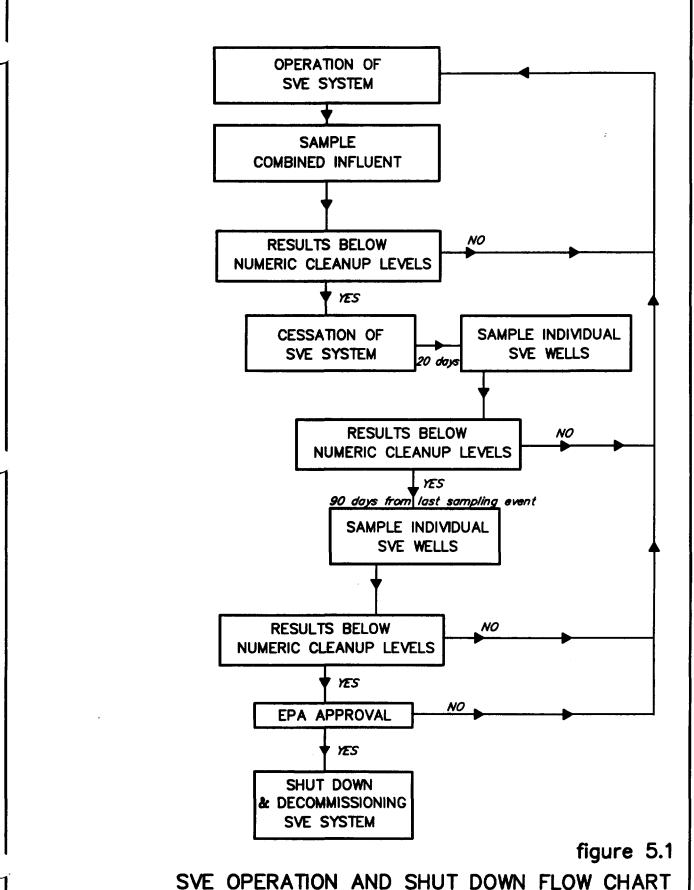
SVE REMEDY-REQUIRED SUBSITES AND PLUG-IN SUBSITES

Tucson, Arizona

DEC 10/98 (P-04)



DEC 4/98 (P-02)



SVE OPERATION AND SHUT DOWN FLOW CHART Tucson, Arizona

CRA

TABLES

for Appendix B, SOW

TABLE 2.1

SVE REMEDY REQUIRED SUBSITES

Buildings 14/15

Buildings 16/17

Building 18

Building 25 and adjacent soils to the north (southern portion of Building 24)

Soils beneath West Lease Underground Storage Tanks (USTs)

North and East Sides of Hangar 1

Hangar 1

South Portion of Hangar 2

TABLE 2.2

PLUG-IN SUBSITES

Credit Union Dump

C-294 Burn Pit

D-3 Fire Drill Area

TAA Landfill

South Ramp and Drains

West End of Runway 3

Former Building 32

Hamilton Buildings D-252, D-267 and D-275

North End of Samsonite Building D-167

TABLE 2.3

SELECTED PERFORMANCE STANDARDS, CLEANUP STANDARDS, AND DISCHARGE STANDARDS FOR GROUNDWATER

| | Federal MCL (pg/L) | ADEQ HBGLs (pg/L) | Selected Performance Standard & Cleanup Standard (µg/L) |
|---|-----------------------|----------------------|---|
| Contaminant of Concern (a) | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | None | 210,000 | 210,000 |
| 1,1-Dichloroethane (1,1-DCA) | 5 | 70 | 5 |
| 1,1-Dichloroethene (1,1-DCE) | 7 | 6.3 | 7 |
| 1,2-Dichloroethane (1,2-DCA) | 5 | 0.38 | 5 |
| cis-1,2-Dichloroethene (cis-1,2-DCE) | 70 | 70 | 7 0 |
| trans-1,2-Dichloroethene (trans-1,2-DCE) | 100 | 140 | 100 |
| 1,2-Dichloropropane (1,2-DCP) | 5 | 0.5 | 5 |
| 1,1,1-Trichloroethane | 200 | 200 | 200 |
| Acetone | None | 700 | 700 |
| Arsenic | 50 | 0.02 | 50 |
| Benzene | 5 | 1.2 | 5 |
| Bis(2-ethylhexyl)phthalate | 6 | None | 6 |
| Carbon tetrachloride | 5 | 0.27 | 5 |
| Chlorobenzene | 100 | 140 | 100 |
| Chloroform (TCM) | 100 | 5.7 | 100 |
| Chloromethane | None | 2.7 | 2.7 |
| Chromium | 100 | 100 | 100 |
| Dichlorodifluoromethane (Freon 12) | None | 1,400 | 1400(b) |
| Ethylbenzene | 700 | 700 | 700 |
| Lead | 15 | 5 | 15 |
| Methyl ethyl ketone | None | 350 | 350 |
| Methylene chloride (DCM) | 5 (d) | None | 5 |
| Nitrate (as Nitrogen) | 10,000 | 10,000 | 10,000 |
| Tetrachloroethene (PCE) | 5 | 0.70 | 5 |
| Toluene | 1,000 | 1,400 | 1,000 |
| Trichloroethene (TCE) | 5 | 3.2 | 5 |
| Trichlorofluoromethane (Freon 11) | None | 2,100 | 2,100 |
| Trihalomethanes (c) | 100 | None | 100 |
| Xylenes | 10,000 | 10,000 | 10,000 |
| Vinyl chloride (chloroethene) | 2 | 0.02 | 2 |

Notes:

 μ g/L = micrograms per liter.

ADEQ = Arizona Department of Environmental Quality.

HBGLs = Health Based Guidance Level, Human Based Guidance Levels for Contaminants in Drinking Water and Soil, ADEQ, March, 1996.

MCL = Maximum Contaminant Level.

- (a) Compounds were detected in groundwater samples collected during the RI or were Chemicals of Potential Concern for Soil Gas.
- (b) ADEQ MCL Arizona Department of Environmental Quality Maximum Contaminant Level.
- (c) The sum of trihalomethanes MCL = 100 (includes chloroform, bromodichloromethane, dibromochloromethane and tribromomethane.
- (d) Proposed MCL.

TABLE 2.4

TCLP REGULATORY STANDARDS

| Parameter | EPA TCLP (mg/L) |
|-----------|--------------------|
| Antimony | NA |
| Arsenic | 5.0 |
| Barium | 100 |
| Cadmium | 1.0 |
| Chromium | 5.0 |
| Lead | 5.0 |
| Mercury | 0.2 |
| Selenium | 1.0 |
| Silver | 5.0 |
| Zinc | NA |

Notes:

TCLP - Toxicity Characteristic Leaching Procedure Standards, 40 CFR Part 261. mg/L - milligrams/liter. NA - not applicable.

TABLE 3.1 TABLE OF CONTENTS FOR FI SUMMARY REPORTS

| SECTION 1.0 | INTRODUCTION |
|-------------|--|
| SECTION 2.0 | SITE DESCRIPTIONS AND RATIONALE FOR WELL PLACEMENT (IF APPLICABLE) |
| SECTION 3.0 | SUMMARY OF INVESTIGATION ACTIVITIES |
| SECTION 4.0 | LABORATORY DATA QUALITY ASSESSMENT |
| SECTION 5.0 | SITE HYDROGEOLOGY (IF APPLICABLE) |
| SECTION 6.0 | INVESTIGATION RESULTS |
| SECTION 7.0 | SUMMARY AND CONCLUSIONS |

TABLE 5.1

GROUNDWATER MONITORING PROGRAM

| Monitoring | Well | Sreened | | VOCs | | | | Water Levels | | | | TCL/TAL | | | |
|------------|---------|----------|-------|-------------|-------|-------|---------|--------------|-------|-------|---------|-------------|-------|-------|---------|
| Location | Type | Interval | Year: | Pre O&M (1) | 1 (2) | 2 (2) | 3 (2,3) | Pre O&M (1) | I (2) | 2 (2) | 3 (2,3) | Pre O&M (1) | 1 (2) | 2 (2) | 3 (2,3) |
| S-1 | MPSG/GW | SGZ | | S | Q | S | A | S | Q | S | A | ** | | | |
| S-2 | MPSG/GW | SGZ | | S | Q | S | A | S | Q | S | Α | •• | | | |
| S-4 | GW | SGZ | | S | Q | S | Α | S | Q | S | Α | •• | | | |
| S-5 | MPSG/GW | SGZ | | | Q | S | Α | | Q | S | Α | | •• | | |
| S-8 | MPSG/GW | SGZ | | Α | S | A | | A | Q | S | Α | | | | |
| S-9 | MPSG/GW | SGZ | | A | Q | S | A | A | Q | S | A | | | | |
| S-10 | MPSG/GW | SGZ | | | S | A | | | Q | S | A | | | | |
| S-11 | MPSG/GW | SGZ | | | S | A | | | Q | S | A | | | | |
| S-12 | MPSG/GW | SGZ | | S | Q | S | A | S | Q | S | Α | | | | |
| S-16 | MPSG/GW | SGZ | | S | Q | S | Α | S | Q | S | Α | •• | | | |
| S-16B | GW | Gravel | | S | Q | S | Α | S | Q | S | A | •• | | | |
| S-17 | GW | SGZ | | S | Q | S | Α | S | Q | S | A | | | | |
| S-18 | GW | SGZ | | S | Q | S | Α | S | Q | S | Α | | | | · |
| S-19 | MPSG/GW | SGZ | | S | S | Α | | S | Q | S | Α | | | | |
| S-20 | GW | SGZ | | | S | Α | | | Q | S | A | | | | |
| S-21 | MPSG/GW | SGZ | | S | Q | S | Α | S | Q | S | A | | | _ | |
| S-21B | GW | Gravel | | S | Q | S | Α | S | Q | S | Α | | | | |
| S-23 | GW | SGZ | | S | S | Α | | S | Q | S | A | | | | |
| S-24 | GW | SGZ | | S | S | Α | | S | Q | S | A | •• | | | |
| S-25 | GW | SGZ | | S | S | Α | | S | Q | S | A | | | | |
| S-26 | GW | SGZ | | S | Q | S | Α | S | Q | S | A | | | | |
| S-27 | MPSG/GW | SGZ | | | S | Α | | | Q | S | A | | | | |
| S-29 | GW | Gravel | | S | Q | S | Α | S | Q | S | A | | | | |
| S-30 | GW | SGZ | | S | S | Α | | S | Q | S | A | | | | |
| S-31 | MPSG/GW | SGZ | | S | S | Α | | S | Q | S | Α | | | | |
| S-34 | MPSG/GW | SGZ | | S | S | Α | | S | Q | S | Α | | | | •• |
| S-37 | GW | Gravel | | s | Q | S | Α | S | Q | S | Α | | | | |
| S-39 | GW | Gravel | | S | Q | S | Α | S | Q | S | Α | | | | |
| S-42 | GW | SGZ | | S | Š | Α | •• | S | Q | S | Α | | | | |
| D-1 | GW | RA | | S | S | Α | | S | ò | S | Α | | | | |

TABLE 5.1
GROUNDWATER MONITORING PROGRAM

| Monitoring | Well | Sreened | | VOCs | | | | Water Levels | | | | TCL/TAL | | | |
|-----------------|-------------|----------|-------|-------------|-------|-------|---------|--------------|-------|-------|---------|-------------|-------|-------|---------|
| Location | Type | Interval | Year: | Pre O&M (1) | 1 (2) | 2 (2) | 3 (2,3) | Pre O&M (1) | 1 (2) | 2 (2) | 3 (2,3) | Pre O&M (1) | 1 (2) | 2 (2) | 3 (2,3) |
| D-2 | GW | RA | | S | Q | S | | S | Q | S | Α | | | | |
| D-3 | GW | RA | | S | S | Α | | S | Q | S | Α | | | | |
| D-4 | GW | RA | | A | S | Α | •• | Α | Q | S | Α | | | | |
| D-5 | GW | RA | | S | S | A | •• | S | Q | S | Α | | | | |
| D-6 | GW | RA | | S | Q | S | A | S | Q | S | Α | | | | |
| D-7 | GW | RA | | S | Q | S | Α | S | Q. | S | Α | | | | - |
| D-8 | GW | RA | | S | S | A | | S | Q | S | A | | | | |
| Extraction Well | s | | | | W3M9 | A | A | | W3M9 | s | s | | | | - |
| Treatment Syste | em Influent | | | | W3M9 | Q | Q | | W3M9 | Q | s | | A | A | A |
| Treatment Syste | em Effluent | | | | W3M9 | Q | Q | | W3M9 | Q | s | | A | A | A |

Notes:

MPSG/GW - Multi-Port Soil Gas/Groundwater

GW - Groundwater

SGZ - Shallow Groundwater Zone

RA - Regional Aquifer

VOCs - Volatile Organic Compounds

TCL/TAL - Target Compound List/Target Analyte List Analyses

W3M9 - Weekly for the first 3 months once EPA determines system in operation, monthly for the next 9 months.

- Q Quarterly
- S Semi-Annually
- A Annually
- (1) Refers to the period from the Effective Date of the Consent Decree, until receipt of EPA approval of the Groundwater Treatment System O&M Manual.
- (2) Refers to the period after receipt of EPA approval of the Groundwater Treatment System O&M Manual.
- (3) Until the end of the monitoring program as determined by EPA.

SCHEDULE OF DELIVERABLES

| . Deliverable | Date Due (2) |
|---|--|
| Remedial Design Work Plan | 60 Days after Effective Date (1) |
| Periodic Progress Reports | (3) |
| SGZ Remedy | |
| TI Zone SGZ Remedy | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan |
| SGZ Remedy Technical Memorandum - Part I | 20 Days following the Project Meeting |
| SGZ Remedy Design Report - Part I | 160 Days after EPA Approval of Technical Memorandum |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting |
| TI Zone Performance Standards Attainment Evaluation Report | 6 Months After Startup Date |
| SGZ Remedy: Outside the TI Zone - Phase 1 | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan |
| SGZ Remedy Technical Memorandum - Part II | 20 Days following the Project Meeting |
| SGZ Remedy Design Report - Part II | 160 Days after EPA Approval of Technical Memorandum |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting |
| SGZ Remedy: Outside the TI Zone - Phase II | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan |
| SGZ Remedy Technical Memorandum - Part III | 20 Days following the Project Meeting |
| SGZ Remedy Design Report - Part III | 160 Days after EPA Approval of Technical Memorandum |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting |
| Airport Property Performance Standards Attainment Evaluation Report (including Enhancement Evaluation | n) 2 Years After EPA Approves Construction Inspection Report |
| Off-Airport Property Performance Standards Attainment Evaluation Report | 5 Years After EPA Approves Construction Inspection Report |

Table 6.1 (Cont.)

Page 2 of 3

SCHEDULE OF DELIVERABLES

Deliverable

SGZ Remedy: Outside the TI Zone - Phase III (4)

Groundwater Phase III Design Project Meeting SGZ Remedy Phase III Design Report Draft Operation and Maintenance Manual Construction Inspection Report

Remedial Action Completion Report Work Completion Report

SVE Remedy

Remedy-Required Sites

SVE Remedy Design Project Meeting
SVE Remedy Technical Memorandum - Part I
SVE Remedy Design Report - Part I
Draft Operation and Maintenance Manual
Construction Inspection Report
Performance Standards Attainment Evaluation Report

Plug-In Sites SVE Remedy

Vadose Zone Impact Analyses Modeling Report SVE Remedy Design Project Meeting SVE Remedy Technical Memorandum - Part II SVE Remedy Design Report - Part II Draft Operation and Maintenance Manual Construction Inspection Report

Remedial Action Completion Report Work Completion Report

Date Due (2)

90 Days after EPA's ROD Modification Becomes Final

40 Days after EPA Approval of Project Meeting

20 Days Before Startup Date

20 Days following Construction Inspection Meeting

Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

120 Days after EPA Approval of Remedial Design Work Plan

20 Days following the Project Meeting

160 Days after EPA Approval of Technical Memorandum

20 Days Before Startup Date

20 Days following Construction Inspection Meeting

120 Days After EPA Approves Construction Inspection Report

80 Days after Effective Date

120 Days after EPA Approval of Remedial Design Work Plan

20 Days following the Project Meeting

160 Days after EPA Approval of Technical Memorandum

20 Days Before Startup Date

20 Days following Construction Inspection Meeting

Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

Table 6.1 (Cont.)

SCHEDULE OF DELIVERABLES

Deliverable

PCB Soils Remedy

PCB Soil Field Investigation Technical Proposal PCB Soil Field Investigation Summary Report PCB Soils Design Report/Remedial Action Work Plan Construction Inspection Report Remedial Action Completion Report Work Completion Report

TAA Landfill Remedy

TAA Landfill Remedial Design Project Meeting TAA Landfill Remedy Technical Memorandum TAA Landfill Remedial Design Report Draft Operation and Maintenance Manual **Construction Inspection Report** Remedial Action Completion Report Work Completion Report

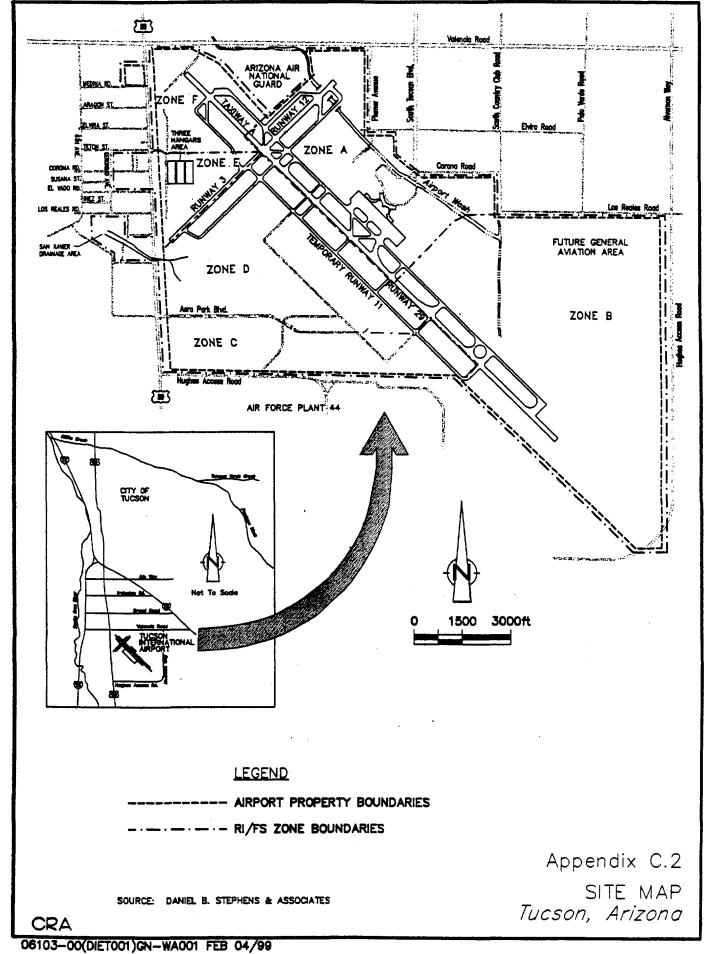
Date Due (2)

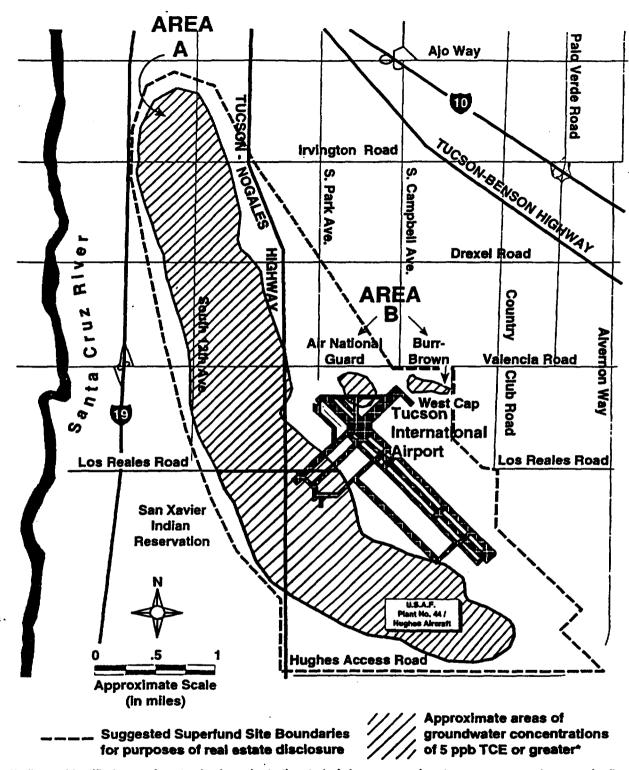
35 Days after EPA Approval of the SVE Remedy Design Report 20 Days after Receipt of Final Analytical Results from FI 60 Days after EPA Approval of PCB Soil Field Investigation Summary Report 20 Days after Construction Inspection Meeting Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

60 Days after EPA Approval of PCB Soils Design Report/Remedial Action Work Plan 20 Days following the Project Meeting 90 Days after EPA Approval of Technical Memorandum Before Construction of Closure is Completed 20 Days after Construction Inspection Meeting Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

Notes:

- (1) The "Effective Date" is the Effective Date defined in the Consent Decree.
- (2) Days are based on Working Days.
- (3) The Settling Defendants will submit Progress Reports in accordance with Section X of the Consent Decree.
- (4) The deadlines specified for this Remedy are relevant if Phase III includes actions other than continuing with Phase II.

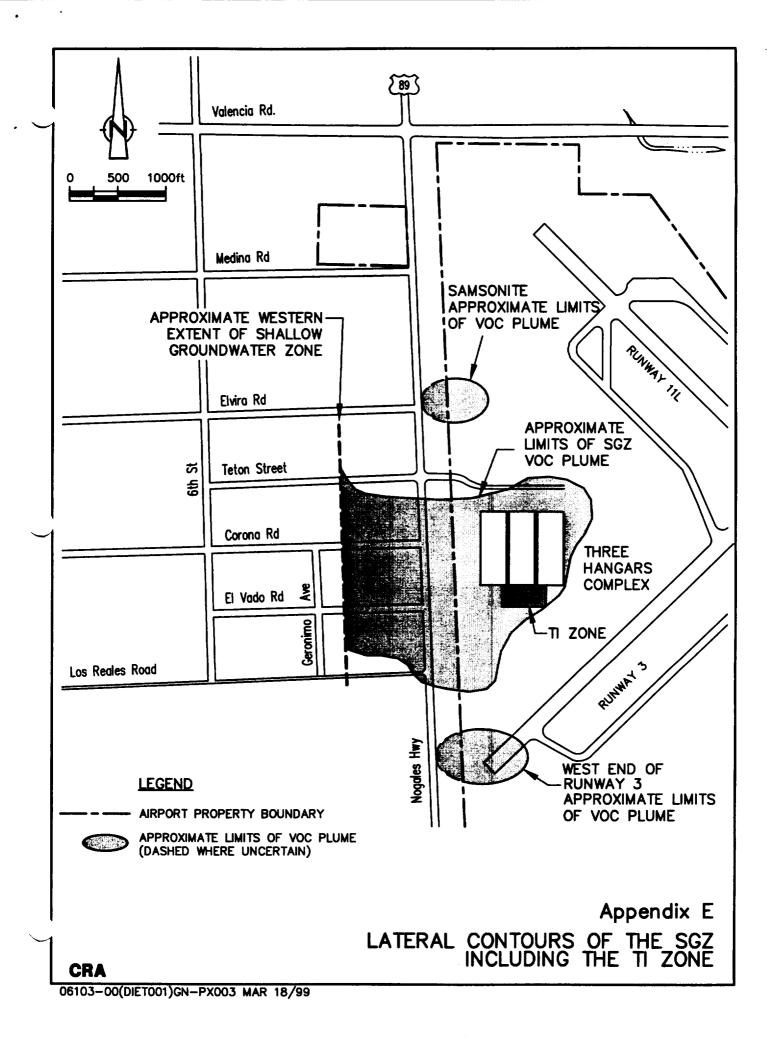




*Indicates identified area of contamination prior to the start of cleanup; ongoing cleanup programs have markedly reduced the area of contamination.

Appendix D

Tucson International Airport Area Superfund Site
TIAA Site Record of Decision



Appendix K

SCHEDULE OF DELIVERABLES

5 Years After EPA Approves Construction Inspection Report

| . Deliverable | Date Due (2) | | | | | |
|--|---|--|--|--|--|--|
| Remedial Design Work Plan | 60 Days after Effective Date (1) | | | | | |
| Periodic Progress Reports | (3) | | | | | |
| SGZ Remedy | | | | | | |
| TI Zone SGZ Remedy | | | | | | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan | | | | | |
| SGZ Remedy Technical Memorandum - Part I | 20 Days following the Project Meeting | | | | | |
| SGZ Remedy Design Report - Part I | 160 Days after EPA Approval of Technical Memorandum | | | | | |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date | | | | | |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting | | | | | |
| TI Zone Performance Standards Attainment Evaluation Report | 6 Months After Startup Date | | | | | |
| SGZ Remedy: Outside the Tl Zone - Phase 1 | | | | | | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan | | | | | |
| SGZ Remedy Technical Memorandum - Part II | 20 Days following the Project Meeting | | | | | |
| SGZ Remedy Design Report - Part II | 160 Days after EPA Approval of Technical Memorandum | | | | | |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date | | | | | |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting | | | | | |
| SGZ Remedy: Outside the Tl Zone - Phase II | | | | | | |
| SGZ Remedy Design Project Meeting | 120 Days after EPA Approval of Remedial Design Work Plan | | | | | |
| SGZ Remedy Technical Memorandum - Part III | 20 Days following the Project Meeting | | | | | |
| SGZ Remedy Design Report - Part III | 160 Days after EPA Approval of Technical Memorandum | | | | | |
| Draft Operation and Maintenance Manual | 20 Days Before Startup Date | | | | | |
| Construction Inspection Report | 20 Days following Construction Inspection Meeting | | | | | |
| Airport Property Performance Standards Attainment Evaluation Report (including Enhancement Evaluation) | 2 Years After EPA Approves Construction Inspection Report | | | | | |

Off-Airport Property Performance Standards Attainment Evaluation Report

Appenix K (Cont.)

Page 2 of 3

SCHEDULE OF DELIVERABLES

Deliverable

SGZ Remedy: Outside the T1 Zone - Phase III (4)

Groundwater Phase III Design Project Meeting SGZ Remedy Phase III Design Report Draft Operation and Maintenance Manual Construction Inspection Report

Remedial Action Completion Report Work Completion Report

SVE Remedy

Remedy-Required Sites

SVE Remedy Design Project Meeting
SVE Remedy Technical Memorandum - Part I
SVE Remedy Design Report - Part I
Draft Operation and Maintenance Manual
Construction Inspection Report
Performance Standards Attainment Evaluation Report

Plug-In Sites SVE Remedy

Vadose Zone Impact Analyses Modeling Report SVE Remedy Design Project Meeting SVE Remedy Technical Memorandum - Part II SVE Remedy Design Report - Part II Draft Operation and Maintenance Manual Construction Inspection Report

Remedial Action Completion Report Work Completion Report

Date Due (2)

90 Days after EPA's ROD Modification Becomes Final 40 Days after EPA Approval of Project Meeting 20 Days Before Startup Date

20 Days following Construction Inspection Meeting

Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

120 Days after EPA Approval of Remedial Design Work Plan
20 Days following the Project Meeting
160 Days after EPA Approval of Technical Memorandum
20 Days Before Startup Date
20 Days following Construction Inspection Meeting
120 Days After EPA Approves Construction Inspection Report

80 Days after Effective Date
120 Days after EPA Approval of Remedial Design Work Plan
20 Days following the Project Meeting
160 Days after EPA Approval of Technical Memorandum
20 Days Before Startup Date
20 Days following Construction Inspection Meeting

Per Paragraph 47 of the Consent Decree Per Paragraph 48 of the Consent Decree

Appendix K (Cont.)

SCHEDULE OF DELIVERABLES

Deliverable

PCB Soils Remedy

PCB Soil Field Investigation Technical Proposal
PCB Soil Field Investigation Summary Report
PCB Soils Design Report/Remedial Action Work Plan
Construction Inspection Report
Remedial Action Completion Report
Work Completion Report

TAA Landfill Remedy

TAA Landfill Remedial Design Project Meeting
TAA Landfill Remedy Technical Memorandum
TAA Landfill Remedial Design Report
Draft Operation and Maintenance Manual
Construction Inspection Report
Remedial Action Completion Report
Work Completion Report

Notes:

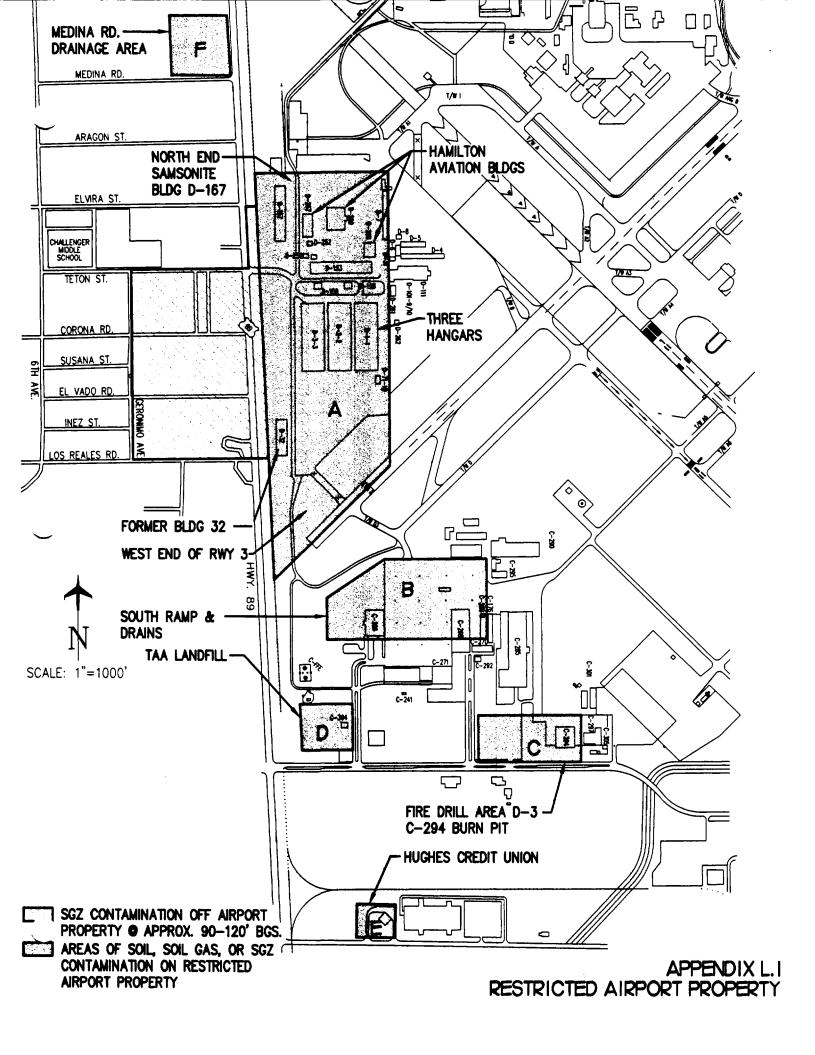
- (1) The "Effective Date" is the Effective Date defined in the Consent Decree.
- (2) Days are based on Working Days.
- (3) The Settling Defendants will submit Progress Reports in accordance with Section X of the Consent Decree.
- (4) The deadlines specified for this Remedy are relevant if Phase III includes actions other than continuing with Phase II.

Date Due (2)

35 Days after EPA Approval of the SVE Remedy Design Report
20 Days after Receipt of Final Analytical Results from FI
60 Days after EPA Approval of PCB Soil Field Investigation Summary Report
20 Days after Construction Inspection Meeting
Per Paragraph 47 of the Consent Decree

Per Paragraph 48 of the Consent Decree

60 Days after EPA Approval of PCB Soils Design Report/Remedial Action Work Plan
20 Days following the Project Meeting
90 Days after EPA Approval of Technical Memorandum
Before Construction of Closure is Completed
20 Days after Construction Inspection Meeting
Per Paragraph 47 of the Consent Decree
Per Paragraph 48 of the Consent Decree



APPENDIX M CHEMICALS SUBJECT TO PARAGRAPH 20

(The chemicals listed in this table do not include tentatively identified compounds (TICs) from the RI/FS.)

Chemical

- 1,1,1-TRICHLOROETHANE
- 1,1,2,2-TETRACHLOROETHANE
- 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
- 1,1,2-TRICHLOROETHANE
- 1,1-DICHLOROETHANE
- 1,1,3-TRIMETHYL-CYCLOHEXANE
- 1,1-DICHLOROETHENE
- 1,2,3-TRICHLOROPROPANE
- 1,2,4-TRIMETHYL-CYCLOPENTANE
- 1,2,4-TRICHLOROBENZENE
- 1,2,4-TRIMETHYLBENZENE
- 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
- 1,2-DIMETHYL,CIS-CYCLOHEXANE
- 1,2-DIMETHYL, CIS-CYCLOPENTANE
- 1,2-DIMETHYL-CYCLOPENTANE
- 1,2-DICHLOROBENZENE
- 1,2-DICHLOROETHANE
- 1,2-DICHLOROETHENE (CIS/TRANS)
- 1,2-DICHLOROPROPANE
- 1,3,5-TRIMETHYLBENZENE
- 1,3-BUTADIENE
- 1,3-DICHLOROBENZENE
- 1,4-DICHLOROBENZENE
- 1,4-DIOXANE
- 1-PENTANOL
- 1-METHYLETHYLBENZENE (CUMENE)
- 2,4,6-TRIBROMOPHENOL
- 2,4-DIMETHYLPHENOL
- 2-BUTANONE
- 2-FLUOROBIPHENYL
- 2-FLUOROPHENOL
- 2-METHYLNAPHTHALENE
- 2-METHYL-1-BUTANOL
- 2-PROPANOL
- 4-ETHYLTOLUENE
- 4-METHYL-2-PENTANONE (MIBK)
- 4-METHYLPHENOL
- **ACETONE**
- **ANTIMONY**
- **AROCLOR 1254**
- AROCLOR 1260
- **ARSENIC**
- **BARIUM**
- BENZENE
- **BENZO(K)FLUORANTHENE**
- BERYLLIUM
- **BIS(2-ETHYLHEXYL)PHTHALATE**
- **BROMODICHLOROMETHANE**
- **BROMOFORM**

BROMOFLUOROBENZENE

BROMOMETHANE

CADMIUM

CALCIUM

CARBAZOLE

CARBON DISULFIDE

CARBON TETRACHLORIDE

CHLORIDE

CHLOROBENZENE

CHLOROETHANE

CHLOROFORM

CHLOROMETHANE

CHROMIUM

CHROMIUM (VI)

COPPER

DIBENZOFURAN

DICHLOROBENZENES (TOTAL)

DICHLORODIFLUOROMETHANE

DIBENZ(A,H)ANTHRACE

DI-N-BUTYL PHTHALATE

ETHANOL

ETHYL-CYCLOHEXANE

ETHYL-CYCLOPENTANE

ETHYLBENZENE

EUCALYPTOL

FLUORIDE

FREON-113

HEPTANE

HEXANE

IRON

LEAD

M.P-XYLENE

MAGNESIUM

MERCURY

METHYL-CYCLOHEPTANE

METHYLENE CHLORIDE

NAPHTHALENE

NITRATE (as Nitrogen)

NICKEL

N-BUTYLBENZENE

NITROBENZENE

N-NITROSODIPHENYLAMINE

OCTAHYDRO-PENTALENE

O-XYLENE

PENTACHLOROPHENOL

PENTYL-CYCLOPROPANE

PHENANTHRENE

POTASSIUM

PROPYLENE

SEC-BUTYLBENZENE

SELENIUM

SILVER

SODIUM

TERT-BUTYLBENZENE

TETRACHLOROETHENE

THALLIUM

TOLUENE
TOTAL XYLENES
TRICHLOROETHANE (TCA)
TRICHLOROETHENE
TRIHALOMETHANES (defined in Table 6 the ROD)
TRICHLOROFLUOROMETHANE
TRICHLOROTRIFLUOROETHANE
VINYL CHLORIDE
XYLENES (TOTAL)
ZINC